

BUSINESS WEEK

WEEK
AGO

YEAR
AGO

START
OF WAR
1939



With the Navy weighing anchor for invasion, James Forrestal got a call to hold the helm.

In This Issue:

Prelude to Victory

Special Reports for Executives



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Years ago motor and generator brushes had eye strips or wire bristles to conduct electricity from stationary to rotating parts—that's how they got the name. Carbon is now the material for all sizes of these brushes.

THEY HELP BRING THE GIANTS HOME

ONE of the "little things" that are contributing greatly to the safety and welfare of our fighting men, is a special kind of carbon brush used in high-altitude planes. These brushes are essential to the generators and motors that supply energy for the radios, firing apparatus, gun turrets, bomb bay doors, landing gear, and other equipment of the planes. A heavy bomber has more than 40 of these devices requiring brushes.

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Teachers, designers, and operators of electric motors, generators and rotary converters are invited to send for "Modern Psychology 15. This is a series of pamphlets containing practical suggestions on the performance, characteristics, operation, and application of electric motor brushes. There is no obligation.

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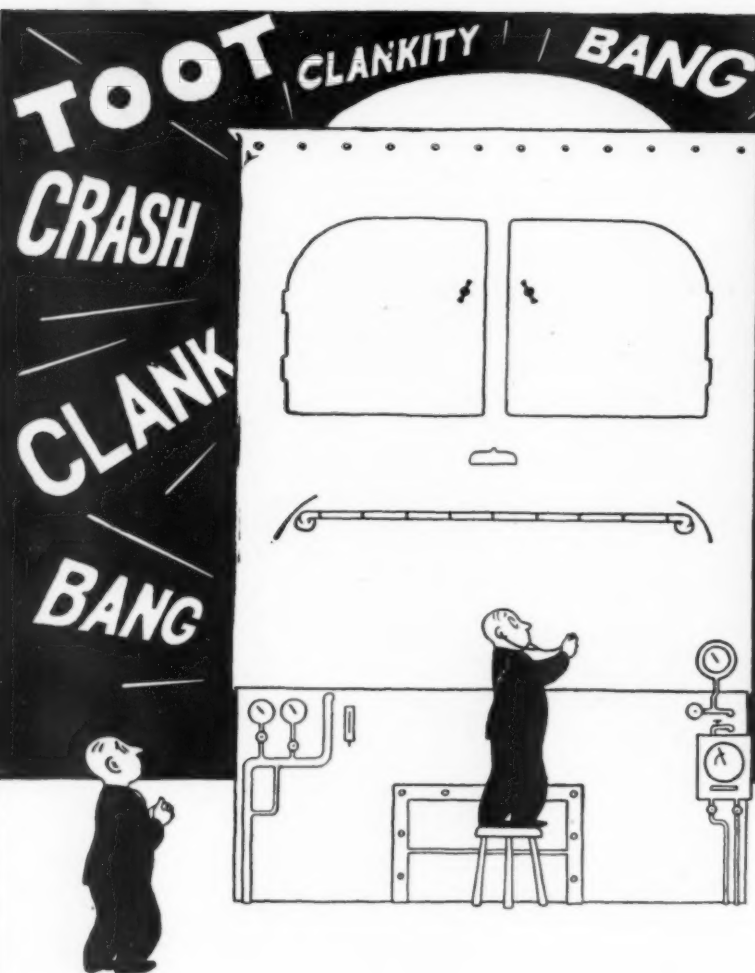


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BUSINESS WEEK

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Alien Goods Must Wait

Invasion is the military's job. It has little immediate significance for the domestic economy is concerned. Tension will ease with the war, but it will be weeks, probably months, until real reconversion gets under way (page 11).

Because invasion year is also election year, the Administration will make concessions to civilians, such as reduction in butter point values, the use of most meat from rationing controls, and maybe even a bit more gas. Nothing will be permitted to interfere with what the Army and Navy say must have.

And because invasion experience will make changes in Army and Navy industry can expect the present turbulence of affairs to be accentuated by demands for rush orders, design changes, program modifications. This will result in a constant shuffling of labor; manpower shortages and unemployment may exist side by side, as production climbs to its almost certain peak in August.

Shutdown May Not Wait

While the invasion is on, WPB may be forced into a reorganizational showdown, but this won't affect industry directly. Differences of opinion between Donald Nelson, WPB chief, and Charles E. Wilson, executive vice-chairman, have stalled such urgent decisions as selection of a new vice-chairman to handle civilian requirements. Dr. William Y. Elliott is still being used as a "common law" vice-chairman but may be shunted into a vacant post as chairman of WPB's Requirements Committee.

Nelson has always been solicitous concerning the welfare of the civilian economy. Some WPB observers think he might be inclined to take over the civilian supply job himself, in fact not in name. Recent conferences between Nelson and Leon Henderson, former price administrator and civilian supply chief, lend support to this conjecture—have even hatched a report that Henderson will come back to the Washington scene.

"Free" Meat Still "Rationed"

The reduction to zero in the point values on all meats except prime cuts of beef doesn't mean they have been

removed from rationing. There's an important technical difference, since this way OPA doesn't have to get War Food Administration's authorization to reinstate point values. Reason for the cut is the big stocks of meat in cold storage and the heavy run of hogs to market.

Price Maintenance Hit

Advocates of price maintenance are discouraged about the Supreme Court.

First, in the *Soft-Lite Lens Co.* case (BW—Apr. 15 '44, p7), the court showed its displeasure with many of the methods used to enforce the minimum price contracts that may be legally issued under the various state and national fair trade laws.

Then last week, the court refused to review a circuit court decision holding several California retail grocers' associations guilty of violating the Sherman antitrust act in attempting to enforce the state's unfair trade practices act (BW—Jan. 8 '44, p84). This type of law, now effective in 29 states, forbids sales below cost plus a percentage to cover a retailer's cost of doing business.

Retail grocery groups evolved this law as their solution to the problem of how to curb loss leader selling, but their success in getting the law on the state statute books will be largely nullified by the court's ban on cooperative action to police enforcement.

PX Gift Deal Fought

Retailers are bucking a deal between the Army Exchange Service and WPB, whereby manufacturers will get special allotments of materials and containers to take care of Christmas gifts which soldiers overseas will order for the folks back home through PX catalogs, bypassing regular trade channels.

Since the beginning of the war, retailers have kept a wary eye on post exchanges (BW—Aug. 15 '42, p20). Grumbling died down after the Army assured them that the PX's were interested only in stocking the basic essentials for soldiers and their families, would not be allowed to spread themselves. Now retailers hear that some exchanges have been doing a brisk business in such prewar luxuries as women's silk stockings. They also believe that PX stocks of many standard items such as face tissues are excessive.

New Idea in Cutbacks

WPB industry divisions are tinkering with a new idea for minimizing losses that will result from sudden termination of government contracts. The proposal is to establish for all major products a series of "stop-work stages," representing natural stopping points in the fabrication process.

When a contract is cut back, procurement officers would notify contractors to cease work at appropriate stop-work stages instead of ordering them to stop all production immediately. With this authority, contractors could continue work long enough to put semi-fabricated goods in the form that would suffer the least loss of value.

Rails Score Double Play

Railroad spokesmen were playing smart poker this week when they tied up the old question of abolishing preferential "land grant" rates on government freight with the current suspension of the 1942 rate increases.

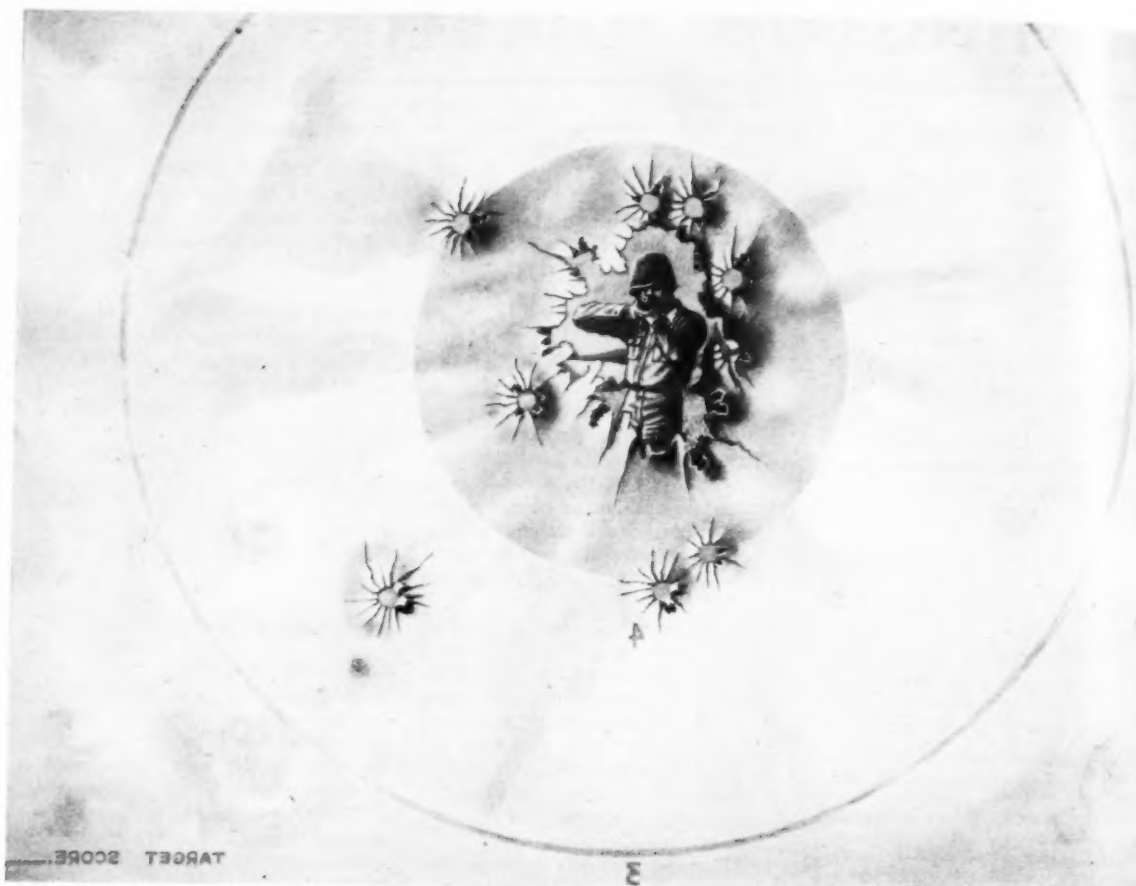
The Assn. of American Railroads notified the Interstate Commerce Commission that it would not object to having the increases—worth about \$300,000,000 a year to the roads—suspended for another six months. At the same time, J. J. Pelley, A.A.R. president, pointed out that net income of the roads has been declining for almost a year and that they may have to reopen the case in less than six months unless Congress does something about the long-stalled Boren bill abolishing "land grant" rates.

The Boren bill, reported out last week by the House Interstate Commerce Committee, would raise income by about \$200,000,000 a year without closing the door on future rate increases if net income should continue to shrink.

Man-Made Quinine

Publicity on the Polaroid Corp.'s synthesis of quinine—the real thing and not a substitute such as Atabrine—is welcome news to the Army and the Navy.

Although the company makes it clear that it's "by no means certain . . . that the synthetic drug can be manufactured on a large scale for use during the war," the generals and admirals have a comfortable feeling that production might be stepped up after the manner of penicillin if supplies of the tree-grown



UNDERWOOD ELLIOTT FISHER, big name in typewriters, made the .30 cal. Carbine M-1—five pounds of the most deadly accurate fire power ever produced. A Shell Industrial Lubricant helped solve a difficult lubrication problem.

Soldier's Sweetheart

A CHANGEOVER from typewriters to carbines called for the installation of new equipment, new methods, and the re-training of nearly all employees. But only 15 months after Underwood Elliott Fisher was awarded a contract, they had produced over a million carbine barrels!

A Shell Industrial Lubricant helped Underwood Elliott Fisher use a new, faster method of chambering the carbine's barrel. The chamber, the enlarged part of the barrel at the "throat"—or magazine end—which holds the cartridge, starts out with the same diameter as the barrel. In 9 operations, its diameter must be enlarged and tapered, and in general shaped to fit the cartridge, including the rim.

Greatest accuracy is necessary in this process. The chambering is done by 3 automatic hydraulically operated Chambering Machines—mammoth, highly specialized pieces of equipment in which everything depends on the lubricant.

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Underwood Elliott Fisher reported success... chambering of carbines set new records.

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LEADERS IN WAR PRODUCTION RELY ON SHELL INDUSTRIAL LUBRICANTS

remedy should become dangerous.

Quinine is an optical concern whose effect on the quinine field is explained by the fact that its material was made of quinine crystals so tiny that the crystal was invisible except under a microscope.

Policy Boomerangs

Both the War and Navy departments are squirming under the tough government policy for most men under 26 which they imposed on war industries.

The Navy has started commissioning scientific personnel in Navy yards under 26 to keep them on the job and out of the draft.

Young key employees of Army plants are being drafted and then sent back to their old jobs at \$50 a month.

Both services are saving this special treatment for those few workers who are regarded as absolutely irreplaceable. Their action demonstrates, however, that they do not plan to trust their key personnel to the whims of the draft, regardless of the effect they impose on private industries.

On Wage Revisions

WPB and the War Manpower Commission have worked out detailed procedures with the National War Labor Board for the handling of wage cases which they have a special interest. Employers who want to adjust wages to solve production and manpower problems apparently would be well advised to apply to WPB and WMC, rather than to NWLB.

Edge Corn for Grinders

Midwest farmers have promised the War Food Administration to sell 30,000 bu. of corn—a three months' supply for wet processors (to help things along, the War Dept. will show some war films in the Corn Belt). The plan now is to get the corn shelled and sold off the farms. In exchange, WFA will increase shipments of feed wheat to the Corn Belt.

Officials admit that processors may be short again this summer, unless more corn is pruned loose (page 50). Midwest crops on farms are 20% smaller than a year ago.

Price Support Idea Flops

Hog trouble again besets the War Food Administration as heavy runs from last fall's record pig crop pile up at the markets and prices drop to and below support levels.

WFA officials are so dismayed by inability to support these and other dollar-and-cents prices for products in seasonal surplus, they'd like to chuck the whole business. They'd do just that if it weren't for commitments already spelled out and the congressional requirement that prices now and for two years after the war be supported at 90% of parity.

Depending upon how the elections go next November, the price support

idea which involves subsidies to processors and consumers may be abandoned for a theoretically more workable cost of production guarantee to farmers (page 57). This would put the Agricultural Adjustment Administration back into production control deeper than ever before.

A Memorandum Dies

WPB authorized production of 193,625 electric irons this week (in addition to the 200,000 already authorized). As evidence that WPB's celebrated memorandum, banning increased civilian production in tight labor areas, is really

Heir Apparent to the Navy

Subordinates often describe James V. Forrestal (see cover), acting secretary of the Navy, as "a tough little cookie." They mean it as a compliment, and, in putting the accent on his toughness, they don't underrate the urbanity and persuasiveness in which it is packaged.

• **Logical Successor**—Forrestal has displayed all three qualities since August, 1940, when he became under secretary of the Navy and immediately took over the job of naval procurement. This means that he has supervised the greatest naval building program in history. When Col. Frank Knox died last week, Forrestal was generally recognized as the logical man to succeed him. Cabinet appointments are likely to be political, but this may not hurt Forrestal if the Administration runs on a platform that there is no substitute for experience, especially with the nation in the midst of a war. He's a life-long Democrat.

Forrestal is a wiry, quick-stepping man of 52. He would be the youngest man in the Cabinet, with the exception of Claude R. Wickard, 51. He is about average height, sparsely built, inconspicuously dressed. His somewhat battered nose—souvenir of an interest in boxing—and his general air of alertness sometimes make visitors think of a scrappy bull terrier in good condition.

Professionally, the acting secretary is known as the more effective half of the Patterson-Forrestal we-want-more team. His poise and skill as an advocate usually show at their best

when he and Under Secretary of War Robert P. Patterson are defending the Army-Navy viewpoint. Forrestal and Patterson are equally opposed to relaxation of controls on civilian production, equally insistent on getting a free hand for the military in acquisition of manpower and materials, but when it comes to stating the case before congressional committees, Forrestal almost invariably sounds more reasonable, less demanding. He thinks fast on his feet, rarely comes out second-best in cross-examination or impromptu debate.

• **Started As Flyer**—Forrestal served as a lieutenant (j.g.) in the Princeton unit of the Naval Air Service from 1917 to 1919. After that he went back to Dillon, Read & Co., New York investment bankers, became president in 1937, stayed until 1940.

Between Dillon Read and the Navy, he did a short hitch as one of the anonymous assistants in the White House, a job that grew out of his friendship with President Roosevelt. (He owns a farm in Dutchess County, N. Y., not far from Hyde Park; both he and Roosevelt are trustees of the Warm Springs Foundation.)

What time he can spare between office work and trips to Capitol Hill, Forrestal gives to athletics, preferably violent athletics. He, his wife, and their two sons are now established in a large Georgetown house, but in recording Washington as his address, Forrestal still adds the notation "temp."

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dead (BW—Apr. 15 '44, p. 5), 192,000 of them will be produced in Mansfield, Ohio, a Group II city.

Capital Gains (and Losses)

OPA's plan for a single, over-all retail price plan to replace GMPR is languishing again—and bets within the agency are that it will never come to anything. Gordon Creighton, who was brought down from Boston to head up the planning, has gone home.

Executives in other departments envy Price Administrator Chester Bowles for the smooth presentations he uses before congressional committees. Recently James V. Forrestal, acting secretary of the Navy, invited Bowles to drop in and show how he works the mirrors.

If the government can't persuade construction contractors to sell 10,000 crawler-type tractors needed in mines and lumber camps, it will probably requisition them.

The Administration's pet public works project, the St. Lawrence seaway and power development, is back in Congress. It will get a hearing, but Sen. John H. Overton of Louisiana, chairman of the Senate Commerce subcommittee, won't let it come to a vote this year.

F. R. Wilcox of the California Fruit Growers Exchange will direct the House Agriculture Committee's investigation into middlemen's profits (BW—Apr. 1 '44, p. 5). The investigation has all the earmarks of a full-dress job. Cotton, grain, and other commodity exchanges may be dragged in before the inquiry ends.

—Business Week's
Washington Bureau

THE COVER

In James Forrestal (page 7), who interrupted a naval career for some 20 years of investment banking, the Navy gets a lieutenant (j.g.) in place of the doughty colonel who presided over its rise from Pearl Harbor. This naval flyer of the first World War steps from his undersecretaryship (since 1940) to the post of acting secretary with the early prospect of seeing invasion in the Atlantic as he recently saw it in the Pacific. While the world awaits that grim prelude to victory over Germany, Business Week presents two preinvasion reports for executives: one in an expanded War and Business Abroad service (pages 113-116), forewarning readers of what to expect on D-Day in Europe, the other (pages 11-12) a special Washington Bureau home-front outlook on the significantly shifting civilian goods situation.

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THE OUTLOOK

BUSINESS WEEK

6, 1944



Most important single piece of business legislation now pending—that for speeding contract termination settlements—was favorably reported to the Senate this week, but faces further delay despite strong bipartisan support.

On the Democratic side, Truman and Murray are pushing it; across the chamber, it has strong support from Austin. Ordinarily, it could be pushed through and sent to the House (where its fate would be uncertain) in jig time.

Now, however, it stands a strong chance of getting stalled behind a poll tax filibuster. Less likely to impede its progress are the joint A.F.L.-C.I.O. "human" demobilization demands; **there is little chance of severance pay being written in as a termination cost so long as War Mobilization Director James F. Byrnes insists on unemployment compensation instead.**

Main point is, though, that contracts still are being terminated at a reported 1½ billion a month with no law to guide in settlement.

●
The Baruch uniform contract termination article (BW—Jan. 15'44, p15) isn't proving an unmixed blessing, well-intentioned as it was.

As more and more contracts are placed with this clause incorporated, and as more and more war contractors are offered the right to substitute it in existing contracts, **corporation lawyers are spotting weaknesses.**

A notable example has to do with the prime contractor's responsibility to his subcontractors. **Heretofore, general practice has been to offer the "sub" a firm commitment; now that is going out of fashion.**

Here's why: Deep in the small type is a requirement that the prime contractor shall "settle all claims arising out of such termination of orders and subcontracts with the approval or ratification of the contracting officer to the extent that he may require."

Lawyers don't like to leave such "approval or ratification" to the caprice of one man. Plants are receiving subcontract offers providing for the usual terms of settlement "on approval of the contracting officer," and **many won't take business with any such runout clause attached.**

The "sub" has to worry about whether he gets paid for unusual expenses, customary advertising, unamortized cost of special tools bought for any given job. He doesn't want some frightened contracting officer empowered to rule out these and other costs ordinarily covered.

●
Inflationary pressures in recent weeks have been less evident than at any time since the outbreak of the war in Europe. Administration stalling, cajoling, and threatening seem to be holding the line amazingly well.

Farm prices were unchanged from Mar. 15 to Apr. 15; even more striking, they were below year-ago levels for the first time since December, 1939.

The Bureau of Labor Statistics cost-of-living index (whether you believe in it 100% or not) has been virtually unchanged for a year.

The inflationary gap—as measured by unused purchasing power—has not increased appreciably in recent months. Income payments to individuals have risen further, to be sure, but taxes have sopped up most of the gain.

●
Stabilization authorities for weeks have been saying, "It will be harder to hold the line from now until invasion than it ever has been before." Now, with invasion at hand, it seems they overestimated their problems.

They have been helped by a popular frame of mind. People have felt they could do with what they had until invasion, that there would be more

THE OUTLOOK (Continued)

BUSINESS WEEK

MAY 6, 1944

goods forthcoming for civilians after we got our foothold on the continent.

Quiet on the steel-wage front has helped ward off inflation fears—and stir speculation on what's up. Labor experts wonder if C.I.O.'s Philip Murray is really trying to break the Little Steel formula now; if the steelworkers are afraid to strike on the eve of invasion; if by any chance there is a political deal on that assures the union of a wage hike.

•
Important policy decisions on disposal of surplus are being quietly made.

Surplus administrator will (1) try to sell inventory or equipment to the manufacturer who has it, offer him easy terms; (2) will be strict with legitimate dealers; (3) will be death on speculators. **Anyone who is not going to use the surplus goods himself will get no better than the ordinary dealer's discount on his purchases.**

Regional advisory committees will be set up to consult with officers terminating contracts. The idea is to determine whether the government would fare best if goods-in-process were carried to completion.

Selling will be decentralized. Reconstruction Finance Corp. has 31 branch offices; about 20 of them will be used; all 13 offices of Treasury Procurement will be used.

Progress is being made on commodity classification, even though government agencies call the same items by all manner of names. Aim is to cut to about 140 commodity groups, then standardize the report forms.

•
Surplus War Property Administration is dead set on blocking any more bargain sales like that of the "over-age" batteries at Ogden, Utah. Education of salvage officers will wipe out any basis for claims of "inexperience."

Anyone who sells to a speculator in the future will have a pretty hard time proving that he didn't dump the goods with knowledge of guilt.

•
Plans for distribution of war surpluses abroad have been tossed to a new committee headed by Leo Crowley, chief of Foreign Economic Administration.

This group is to determine what goods shall stay in foreign lands when the war ends; what surpluses in the United States shall be sold abroad; how re-export to the United States can be prevented; and how re-export to potential foreign customers of the U.S. can be short-circuited.

•
Greatest boon to pulp and paper has been use of prisoners of war in the southern kraft mills; now P. W. lumberjacks are going into the Northeast.

Over the week end, it was announced that a former Civilian Conservation Corps camp at Harrisville, in northern New York state, would be readied to take care of about 160 men by the middle of this month. They will cut pulpwood for St. Regis Paper Co.

There are 21 camps in the South; WPB would like to have 40 in the country to house as many as 20,000 prisoners for pulp and paper jobs.

•
Demand for artillery shells has been multiplied in recent weeks, and the steel trade hears that it is scheduled to go much higher still.

This will give you some idea of the reason: There have been 24-hour periods on the Anzio and Cassino fronts when we have fired more rounds of artillery shells than we have machine-gun cartridges.

Think what that means in terms of invasion of continental Europe.

THE OUTLOOK FOR CIVILIAN GOODS

BUSINESS WEEK

July 6, 1944



SPECIAL REPORT
EXECUTIVES

There has got to be more than just what's left over for civilians from here on. That goes whether the war drags on or the invasion proves a prelude to victory this year.

The War Production Board realizes it's in trouble because it failed to plan civilian economy as precisely as it planned war production. **Now the Office of Civilian Requirements will get a new lease on life.**

If the war is soon over, OCR's big job will be getting first things first for the home front; if not, the task will be correcting mistakes already made. Either way, the agency has to have a lot more power.

The Office of Civilian Requirements has been treated like a stepchild. It has had to get along on whatever was left over after Army, Navy, lend-lease, foreign relief, and other claimants got theirs.

Even when it has received an allotment of materials to make a specific item tabbed essential to a healthy civilian economy, OCR has had to take the allocation to the appropriate WPB industry division. The division usually has decided that manpower and facilities were not available.

The new idea is prescheduling—with the help of the industry divisions—so that OCR will have the follow-through when it gets materials.

Thus allocations for necessary civilian production will become firm commitments, just like those for aircraft and tanks and ships.

Remember, in talking about this civilian production, that the emphasis is on the word "necessary."

We haven't watched that in the past. We had big inventories when we got into the war. Industry did a magnificent job of building the war machine and of turning out the myriad things civilians wanted—but not always the right things or in the right amounts.

It wasn't until we ran short of alarm clocks, radio tubes, work clothes, and diapers that we saw the full fallacy of not scheduling.

Measured in dollars, the consumer hasn't fared too badly; he spent an estimated \$91,000,000,000 on goods and services in 1943 (when it was expected that available supplies wouldn't run over \$80,000,000,000).

First-quarter expenditures in 1944 were at the rate of \$95,000,000,000 for the full year despite gaping holes on retailers' shelves.

Sales of soft goods continue upward. Volume in durable goods dragged bottom in the first half of 1943; now official reports show a modest rise.

WPB now plans to draw a sharp distinction between essential and nonessential civilian production. It can't let OCR launch general reconversion just because some lines obviously have been slighted in the past.

Present thinking: Take a limited number of highly necessary items—perhaps no more than 40—and schedule them just like military output.

On the **soft goods** side, the list would include all the most essential textile production—work clothing, heavy knit underwear, children's clothing, women's house dresses, piece goods. **Hard goods** would include such articles as electric irons, heat control devices, fractional motors, clothespins, alarm clocks.

There might even be a program for washing machines.

Every effort will be made to start production of civilian goods where labor

CIVILIAN GOODS REPORT

BUSINESS WEEK
MAY 6, 1944

is plentiful—in Group III and Group IV areas. This will be done even though some established producers remain shut out for a while.

But if loose labor areas can't turn out what is needed, allocations will go into Group II cities. A few may even go into Group I.

There will be no outright ban on nonessentials, but producers will find the pickings pretty thin. Makers of lampshades, curtains, and high-priced dresses will have a lot more trouble than they do now if all the basic cloth constructions are assigned to certain essential end uses.

Major limiting factor on civilian production will be manpower, of course. Present cutbacks in arms schedules, though large, merely create islands of unemployment, and these disappear rapidly in most cases.

Yet there are potential sources of labor. Responsible civilian officials believe the armed services are overshooting their absolute needs. And it is a well-known fact that manpower can be wasted in essential industries just as easily as in nonessential; WPB expects to demand that the War Manpower Commission and the military cut down on such waste.

Designation of critical labor areas won't be abandoned, but the abortive memorandum banning increased civilian production in Group I and Group II regions now is a dead letter (BW—Apr.22'44,p5).

When the post-Germany cutbacks come, how long will it take to get a substantial volume of civilian goods into production? Probably not as long as most people have been saying.

OCR has made a survey of 85 Controlled Materials Plan codes, covering that many metalworking industries and 6,000 individual concerns.

About a third of these companies will have major reconversion problems, will require three to six months to change over; another third will need under three months; the remainder will go right on making what they are now and just change the earmarking from "military" to "civilian."

Outside the metalworking lines, the changeover generally is a cinch.

Businessmen taking a long-range look at their markets should devote careful study to WPB's Order P-43.

This allows a manufacturer materials for postwar product engineering provided (1) the work can be done without diverting manpower, technical skill, or facilities from the war effort, and (2) the materials are not used to manufacture any product banned by another WPB order.

As interpreted, a manufacturer of paper-making machinery may make experimental models because production of such equipment is not banned by WPB; the manufacturer of printing machinery, on the contrary, may not.

Technically, you can start work on a rocket to the moon, but you can't make a washing machine.

Officials argue that P-43 is too fuzzy, that anybody should be allowed to apply to WPB for authorization on experimental models.

WPB and OCR, while guiding civilian production now, aren't mapping post-war markets. That's industry's problem.

Reconversion would be simple if everyone could get off to an even start, if no newcomers were to shoulder into old lines. But it isn't going to work out that way.

FIGURES OF THE WEEK

	\$ Latest Week	Preceding Week	Month Ago	6 Months Ago	Year Ago
THE INDEX (see chart below)	*241.7	241.4	239.9	240.9	232.6
PRODUCTION					
Steel Ingot Operations (% of capacity)	99.5	100.0	99.5	100.0	98.2
Production of Automobiles and Trucks	16,345	16,905	18,085	19,135	18,990
Engineering Const. Awards (Eng. News-Rec. 4-week daily av. in thousands)	\$6,372	\$6,043	\$5,237	\$8,296	\$12,873
Electric Power Output (million kilowatt-hours)	4,336	4,344	4,409	4,453	3,867
Crude Oil (daily average, 1,000 bbls.)	4,431	4,427	4,383	4,383	3,919
Bituminous Coal (daily average, 1,000 tons)	2,042	11,958	1,979	1,888	1,941
TRADE					
Miscellaneous and L.C.L. Carloadings (daily average, 1,000 cars)	82	80	80	85	79
All Other Carloadings (daily average, 1,000 cars)	58	54	50	65	53
Money in Circulation (Wednesday series, millions)	\$21,396	\$21,334	\$21,037	\$19,090	\$16,593
Department Store Sales (change from same week of preceding year)	-11%	-11%	+17%	+12%	+29%
Business Failures (Dun & Bradstreet, number)	41	20	21	49	52
PRICES (Average for the week)					
Spot Commodity Index (Moody's, Dec. 31, 1931 = 100)	249.5	249.8	250.1	246.6	246.3
Industrial Raw Materials (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)	162.6	162.9	163.1	160.9	159.6
Domestic Farm Products (U. S. Bureau of Labor Statistics, Aug., 1939 = 100)	221.9	222.4	221.9	214.9	208.0
Finished Steel Composite (Steel, ton)	\$56.73	\$56.73	\$56.73	\$56.73	\$56.73
Scrap Steel Composite (Iron Age, ton)	\$19.17	\$19.17	\$19.17	\$19.17	\$19.17
Copper (electrolytic, Connecticut Valley, lb.)	12.000¢	12.000¢	12.000¢	12.000¢	12.000¢
Wheat (No. 2, hard winter, Kansas City, bu.)	\$1.64	\$1.64	\$1.64	\$1.53	\$1.38
Sugar (raw, delivered New York, lb.)	3.74¢	3.74¢	3.74¢	3.74¢	3.74¢
Cotton (middling, ten designated markets, lb.)	20.95¢	20.99¢	21.07¢	20.04¢	21.14¢
Wool Tops (New York, lb.)	\$1.294	\$1.313	\$1.319	\$1.301	\$1.335
Rubber (ribbed smoked sheets, New York, lb.)	22.50¢	22.50¢	22.50¢	22.50¢	22.50¢
FINANCE					
10 Stocks, Price Index (Standard & Poor's Corp.)	94.6	93.3	95.3	94.5	93.2
Medium Grade Corporate Bond Yield (30 Baa issues, Moody's)	3.66%	3.67%	3.70%	3.81%	3.93%
High Grade Corporate Bond Yield (30 Aaa issues, Moody's)	2.73%	2.73%	2.74%	2.69%	2.75%
Call Loans Renewal Rate, N. Y. Stock Exchange (daily average)	1.00%	1.00%	1.00%	1.00%	1.00%
Prime Commercial Paper, 4-to-6 months, N. Y. City (prevailing rate)	$\frac{1}{8}$ - $\frac{3}{8}$ %	$\frac{1}{8}$ - $\frac{3}{8}$ %	$\frac{1}{8}$ - $\frac{3}{8}$ %	$\frac{1}{8}$ - $\frac{3}{8}$ %	$\frac{1}{8}$ - $\frac{3}{8}$ %
BANKING (Millions of dollars)					
Demand Deposits Adjusted, reporting member banks	34,524	34,248	32,660	31,817	30,098
Total Loans and Investments, reporting member banks	51,064	51,453	52,012	52,982	45,772
Commercial and Agricultural Loans, reporting member banks	6,069	6,151	6,305	6,424	5,850
Securities Loans, reporting member banks	1,937	1,961	2,362	2,728	2,156
U. S. Gov't and Gov't Guaranteed Obligations Held, reporting member banks	37,834	38,110	38,087	38,327	31,909
Other Securities Held, reporting member banks	2,867	2,885	2,907	2,887	3,226
Excess Reserves, all member banks (Wednesday series)	600	900	600	1,062	2,224
Total Federal Reserve Credit Outstanding (Wednesday series)	13,485	13,330	12,749	9,686	6,655

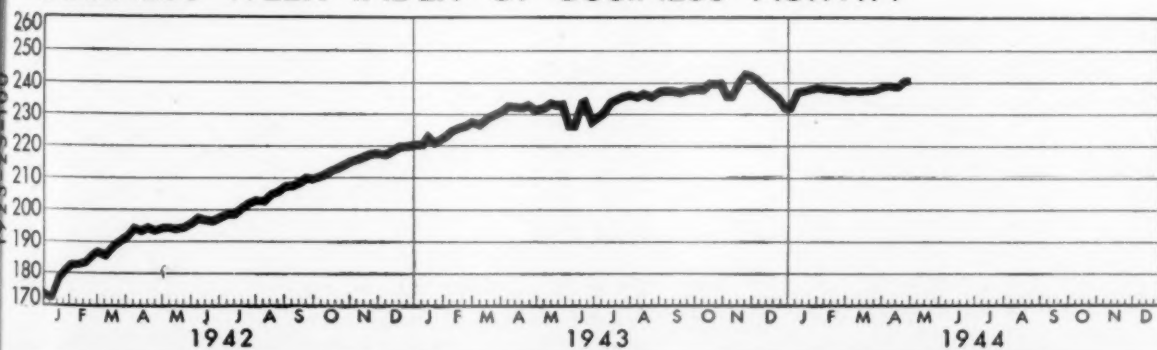
† Preliminary, week ended April 29th.

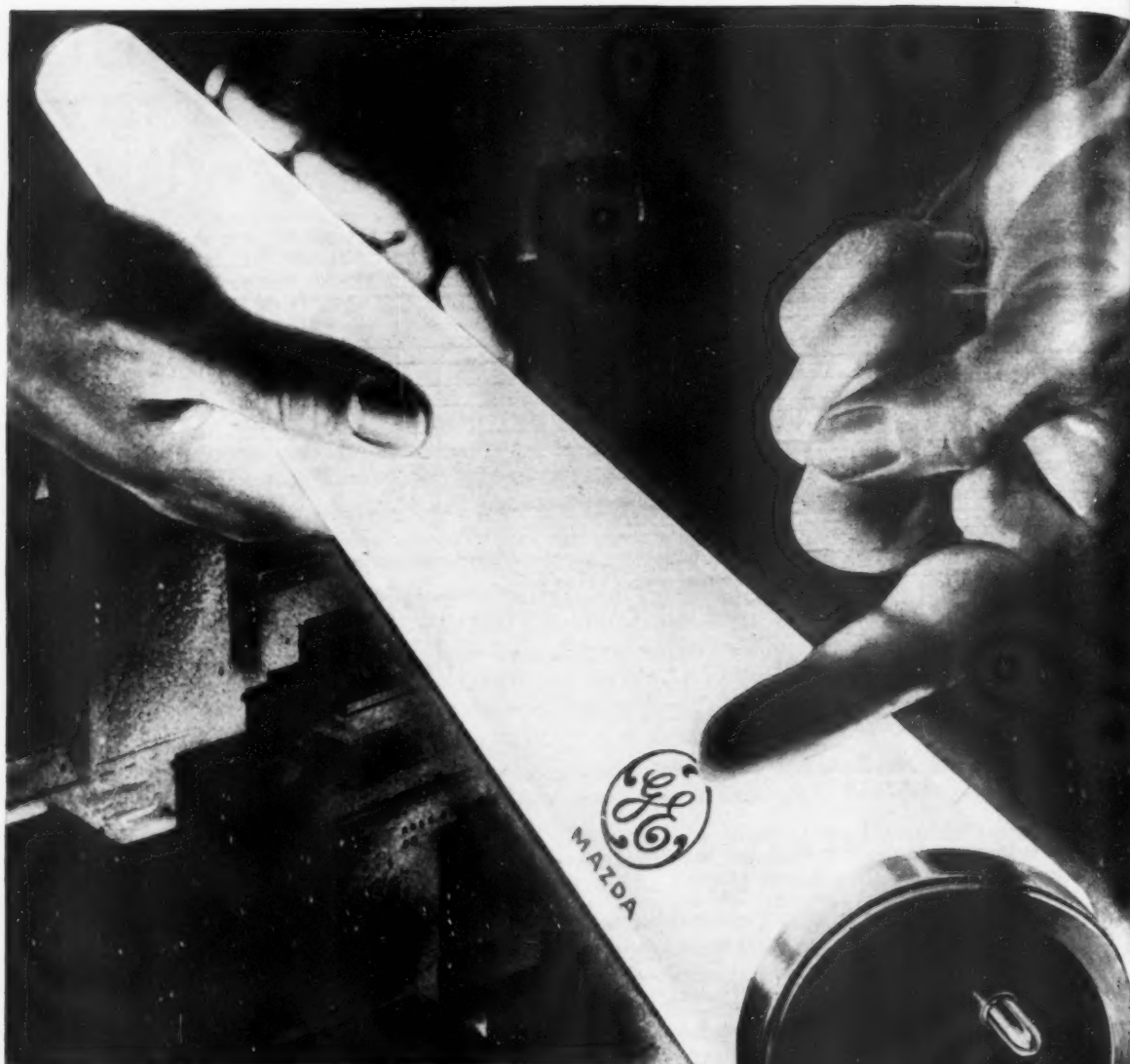
‡ Ceiling fixed by government.

† Revised.

§ Date for "Latest Week" on each series on request.

BUSINESS WEEK INDEX OF BUSINESS ACTIVITY





THE CREED OF G-E LAMP RESEARCH is . .

to make lamps bearing this mark 

Stay Brighter Longer

G-E MAZDA LAMPS

GENERAL  ELECTRIC

Hear the General Electric radio programs: "The G-E All-Girl Orchestra", Sunday 10 p. m. EWT, NBC;
"The World Today" news, every weekday 6:45 p. m. EWT, CBS.

General Electric Lamp
Research has increased
the value that users
obtain from G-E Fluor-
escent lamps over
5-fold in six years.

Make your war bond in-
vestment count to the full—
BUY WAR BONDS
AND HOLD THEM

Montgomery Ward: Three Tests

Government and the mail-order house it has taken over
it court ruling and union election; Administration expects a
er invasion to sway public opinion on the one at Chicago.

The first week of government opera-
at Montgomery Ward & Co.'s
embattled mail-order plants (BW
29'44,p104) closed with the Klieg-
of the national drama turned back
Washington but awaiting action
Chicago.

Washington Worried—As the public
on hit the capital, the Administra-
was plainly unhappy about the line
taken in this case. However, its
esmen were saying that, even with
sight, they didn't see—except for a
minor tactical choices—that it had
any alternative once Ward's board
man, Sewell Avery, had denied that
government had authority to order

an extension of his union contract.

Pro-Avery forces, into which has
coalesced an articulate section of the
business community, focused first on
the fight for congressional investigation
of the case which now seems to be won
in both the House and the Senate.
There was unquestionably a growing
interest in keeping Avery's "dictator-
ship" charge alive as a slogan for the
1944 campaign.

• **Three Points to Watch**—To cut the
political losses which can result from the
imbroglio, the Administration looks first
to three anticipated developments:

(1) A favorable court decision next
week which will give judicial approval

to the seizure of the company's offices
and the removal of Avery from the prem-
ises;

(2) A C.I.O. victory in the National
Labor Relations Board poll of Ward
employees next week which is counted
on to blast the basic Avery contention
that the union does not now represent
a majority of the employees;

(3) The invasion—with a wave of na-
tional feeling on which the government
expects to ride high over the sharp po-
litical rocks on which this home-front
episode has crashed it.

• **Not Sold**—This week it was obvious
that it would take at least an intensifi-
cation of the war to carry the country
along with this latest extension of the
President's debated war powers. Ready,
by and large, to accept the theory of
government authority over war industry
in wartime, the public is clearly unpre-
pared to underwrite an interpretation of
the theory which is broad enough to
classify Montgomery Ward as a war-
essential industry. On this the company

h current Montgomery Ward news being made in both
Washington and Chicago, principals in the imbroglio
ained in the Middle West to help settle a basic legal
question—whether the U. S. had the right to take physical
possession of the concern. At the Blackstone Hotel, Sewell
Avery (right), company board chairman, bowed acknowl-
edgment of a vote of confidence by stockholders (page 77).
the plant's executive offices, Francis Biddle (below,
U. S. Attorney General, listened glumly to an account
seizure problems from Wayne C. Taylor, Under Secre-
of Commerce—Avery's temporary successor—as Leon
Levy (below, right), bespectacled vice-president of the
C.I.O.'s United Retail, Wholesale & Department Store
employees, and Samuel Wolchok, union president, arrived
negotiations with the "new management."



The Montgomery Ward Calendar—1940-44

The dispute between Montgomery Ward & Co. and the C.I.O., which has boiled into one of the hottest home-front issues of the war, began in 1940 when the United Retail, Wholesale & Department Store Employees first attempted to organize Ward's Chicago employees.

● **Routine Campaign**—Little that happened in the early stages of that campaign was of extraordinary interest; it was just familiar, routine plugging away by a handful of organizers, some paid, some volunteer, who sought to establish a branch of their organization in a large employing enterprise. But at least two labor situations in which the company was involved in 1940 were of considerable interest to business.

The first of these was a company challenge of the power of the government to inspect employment records for purposes of administering the Fair Labor Standards (wage-hour) Act. In November, 1940, the U. S. Supreme Court refused to review a lower court ruling that held the government to be within its rights in calling for Ward's books, and thus was established the Wage-Hour Division's authority to scan employers' payrolls.

● **Struck by A.F.L.**—The second was a strike that affected Ward operations in eleven western states. It was exclusively an A.F.L. affair. At issue were wages and a signed contract. One of the most far-flung walkouts the West had ever experienced, the strike had an effect on Christmas season retail trade. After a seven-month struggle, during which the company closed its big Portland (Ore.) and Oakland (Calif.) units, the dispute ended in a compromise.

By the time an accord ended the western war, Montgomery Ward was involved in A.F.L. trouble at Kansas City and elsewhere, and had been breaking lances with the National Labor Relations Board before high and low federal courts.

But in the second half of 1941, the Middle West situation had moved far enough along to come into the

news—and stay there. C.I.O. organizers had intensively cultivated Ward's home ground, the group of plants along the backward-flowing Chicago River and, like the mythological Jason, the seeds they sowed were to prove as dragon's teeth, fated to grow into soldiers.

● **How It Developed**—Step by step, this is how the present Montgomery Ward case developed:

Aug. 8, 1940, the C.I.O. union wins an NLRB-conducted election at the company's Schwinn warehouse, earns its first bona fide right to represent Ward employees.

Sept. 23, 1941, NLRB issues a complaint against the company, alleging unfair labor practices because of refusal to bargain with the union for Schwinn employees.

Feb. 28, 1942, NLRB certifies the union as exclusive bargaining agency for Ward warehouse and retail store employees as a result of an election which the C.I.O. carried 2,361 to 1,245.

June 16, 1942, the National War Labor Board accepts jurisdiction over the Ward case after U. S. Conciliation Service reports negotiations between the union and company have reached an impasse.

Sept. 6, 1942, NWLB, in the first part of a two-part decision, directs a 5¢ hourly wage increase. Ward accepts the order under protest.

Nov. 5, 1942, completing its ruling in the case, NWLB directs Ward to sign with the C.I.O. a contract containing the standard maintenance-of-membership clause. Ward refuses.

Nov. 13, 1942, Sewell Avery, chairman of Ward's board, rejects NWLB's order, contending that it was illegal, but agreed to accept it if directed to do so by the President of the United States.

Nov. 18, 1942, Roosevelt writes the company asking compliance, stating that he considers "such a course of action essential in the interests of our war effort."

Nov. 21, 1942, the company announces that it has complied with the President's order. It inserted a statement in the agreement saying that it was incorporating the provisions ordered by the board "under duress and only because the President of the United States as commander-in-chief in time of war has expressly ordered that they should be included."

Dec. 8, 1942, the board issues another

directive conceding the right of the company to state the conditions under which it had signed the agreement, but barring the "under duress" phrase lest it invalidate the contract.

Dec. 10, 1942, Avery rejects this order and again states that the company would comply if so directed by the President.

Dec. 12, 1942, the President again directs Ward to comply with the order.

Dec. 18, 1942, the company and union sign an agreement incorporating the board order and a provision that it may be terminated after one year.

Dec. 8, 1943, the agreement expires, the company having notified the union that it was canceling the agreement because the C.I.O. no longer had a majority.

Dec. 16, 1943, NWLB asks Ward to show cause why contract should not be extended pending a determination by NLRB of the representation question.

Jan. 13, 1944, NWLB orders contract extended for 30 days, during which time C.I.O. must start in motion proceedings before NLRB for clearing up representation controversy. The company refuses to extend the contract.

Jan. 31, 1944, Ward files "Complaint for Declaratory Judgment and Injunction" in federal court against NWLB's enforcement of its order. Proceedings in the case are still pending.

Apr. 5, 1944, NWLB, finding that the union followed instructions to initiate proceedings to determine the representation question before NWLB, directs the company to comply "forthwith" with the extension order of Jan. 13. Ward declines.

Apr. 12, 1944, C.I.O. strikes; NWLB refers the matter to the President for "appropriate action."

Apr. 23, 1944, Roosevelt orders strikers back to work and directs the company to comply with NWLB order.

Apr. 25, 1944, strikers return to work; company ignores President's request.

Apr. 26, 1944, Dept. of Commerce and Army take over company.

Apr. 27, 1944, government gets temporary restraining order from federal court, barring Ward officials from interfering with government operation.

May 2, 1944, U. S. Judge William H. Holly announces that decision on Ward's plea to dissolve the restraining order and government's plea for an injunction will be forthcoming Monday, May 8.

May 3, 1944, NLRB orders representation poll Tuesday, May 9; union protest asking more time disregarded.

is hanging both its legal and its public relations cases. As Ward's attorney told U. S. Judge William H. Holly this week:

No one, I think, would dare seriously venture that the act empowered the President to seize a country store. Yet thousands of such stores throughout the land carry

farm equipment, automotive parts, hand tools, and wearing apparel, just as does the defendant. While no conclusive statistics are available, I believe it safe to say that the defendant's greatest competitor is not Sears Roebuck & Co., but these thousands of small town and country merchants engaged in the distribution of the same products that the defendant is,

● **Biddle's Comeback**—In reply, Attorney General Francis Biddle presented evidence to show that Washington has contracts with Ward for \$181,556.05 of agricultural equipment for shipment to New Zealand and for \$1,051,126.95 of shoes for lend-lease distribution in liberated areas. Beyond this, he intro-

...ed assertions from the War Production Board that the company has thousands of priority certificates; from the Office of Defense Transportation that Ward is essential enough to tires and gas; from the War Food Administration that Ward-manufactured-and-distributed farm implements are necessary in war food production; and from National War Labor Board chairman William H. Davis that labor disputes at Ward's, if allowed to continue, would spread to other companies. It is this last statement, and the thinking which it bespeaks, that is responsible for the Montgomery Ward imbroglio. When NWLB first assumed jurisdiction over the Ward-C.I.O. dispute on June 16, 1942, its opinion, which had the unanimous backing of its industry members, said:

If 5,500 workers of Montgomery Ward properly strike in Chicago for higher wages and union security . . . it seems to be almost certain that other workers in their establishments would feel that they should have the same right and that, once the strike of the dimensions which are here threatened, against an employer as well known as Montgomery Ward, and in an area as highly industrialized as Chicago, were allowed to take place on the theory that this board lacked authority to deal with the dispute, a fire would be started which before very long might turn into a conflagration.

Proceeding on the basis of that widely debated reasoning, and encouraging the determination of an Avery, what followed is largely the product of inevitability.

Business As Usual—The troops, which provided the token show of force that Avery exacted before leaving the plants to government agents, have returned to their barracks, and Undersecretary of Commerce Wayne C. Taylor who is Federal manager of the Ward establishment is spending little time in the company's office. The matter of possessing the firm's books has been left hanging until Judge Holly rules next Monday on Ward's plea for dissolution of the temporary restraining order that enjoined company officials from interfering with government operations. Company employees are going ahead with preparations for issuing the usual fall and winter catalog as if nothing had happened. The vast Ward business operation is almost undisturbed.

But the imminence of an NLRB-conducted poll-ordered and scheduled with unprecedented speed—to determine whether Ward employees want the C.I.O. to represent them promises shortly to engulf the Chicago Ward plants in what may be one of the most frenzied bargaining elections ever held. And there are some who profess to believe that its outcome will affect the national election next November.

Tax Levy Voided

Supreme Court absolves Mesta of county tax liability for DPC-owned equipment used under lease in Mesta plant.

State and local authorities will have to give up their hopes of hanging direct or indirect taxes on the federal government's \$2,000,000,000 stake in equipment used by private contractors. That, in effect, is the ruling laid down by the U. S. Supreme Court this week on the precedent-setting Mesta Machine Co. case (BW—Jan. 23'43, p74).

● **Clear-Cut Victory**—By seven to two, the court gave Mesta and the government attorneys who intervened on its side a clear-cut victory over Allegheny County (Pittsburgh), Pa. The court also rejected the arguments of the National Institute of Municipal Law Officers, which had lined up behind Allegheny County.

Although a number of cases have arisen which question the tax immunity of government-owned equipment when operated by private contractors, the Mesta dispute is the first in which the Supreme Court has passed on this issue. Unless subsequent rulings narrow its application, it will spread a blanket of immunity over practically all the wartime additions to plant and equipment financed through Defense Plant Corp. and other government agencies.

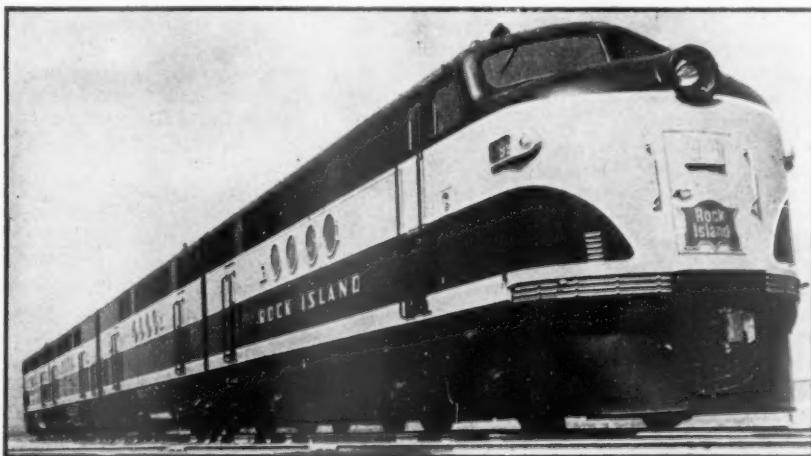
The case hit the courts in 1942 when Allegheny County boosted Mesta's assessment by \$618,000, representing the value of machinery owned by DPC but leased to Mesta for \$1 a year and installed in the company's West Homestead (Pa.) plant. On this increased assessment, the county sought to collect a tax of \$5,137. The Pennsylvania Common Pleas Court ruled for Mesta and the government on the ground that federal property cannot be taxed.

In the State Supreme Court, however, Allegheny County won the round. This court held that the county was taxing the corporation, not the machinery or the federal government, that under Pennsylvania law installations that enhance the value of real property are grounds for an increased assessment regardless of whether they actually are owned by the owner of the real estate.

● **Immunity Doctrine**—The U. S. Supreme Court threw out this argument, holding that increasing the assessment by the value of the machinery amounted to laying a tax on the machinery. Once that hurdle was cleared, the court was free to go back to *McCulloch vs. Maryland*, the civics book standby, and invoke the unchallenged doctrine of immunity of federal property to state taxation.

"We hold," the majority concluded, "that government-owned property, to the full extent of the government's interest therein, is immune from taxation, either as against the government itself or as against one who holds it as bailee."

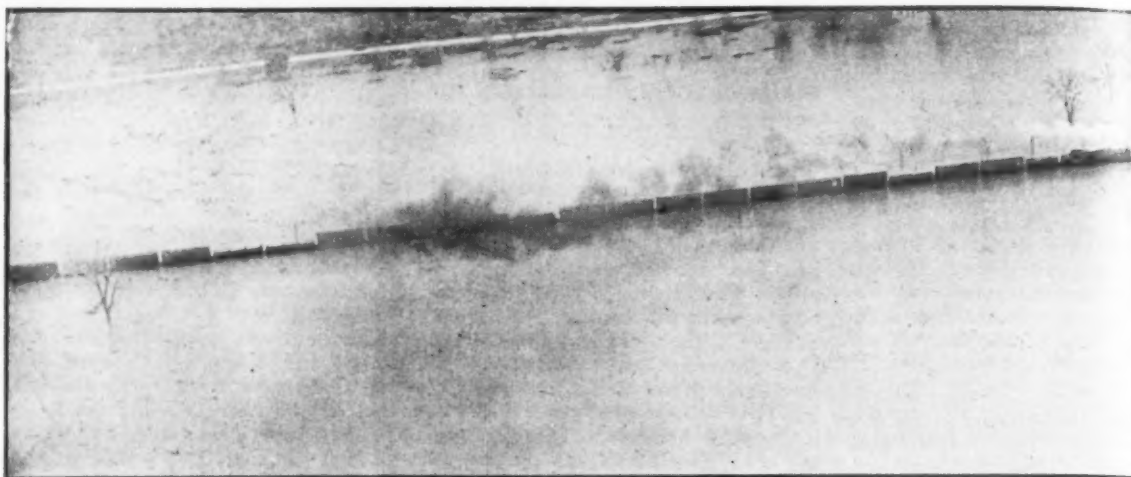
● **Dissents Written**—In a dissenting opinion, Justice Felix Frankfurter held



STREAMLINED "HOGS"

Among the world's largest and most powerful diesel-electric locomotives is the new 5,400-hp. job on the Rock Island Lines. It's No. 1 in a fleet of nine streamlined freight movers being added by the road, and a duplicate of

one recently purchased by the Boston & Maine R.R. Built by General Motors' Electro-Motive Division, the locomotives consist of four sections—each with a 16-cylinder engine. Control cabs at both ends and couplers in the middle allow them to be divided into two 2,700-hp. units.



AMPHIBIOUS TRAIN

Entirely surrounded by water, a Frisco Lines freight train near St. Genevieve, Mo., inches its war cargo through the second disastrous flood in the Mid-

west within a year. As rain-fed torrents swept down the Missouri and Illinois rivers to crest the upper Mississippi at its 100-year record (39 ft.) this week, damage was certain to equal that of last spring's rampage (BW—

May 29 '43, p16). Besides ruining 1,500,000 acres of early crops, raging waters left 6,000 homeless, and smashed levees at several points. Battling the flood are war prisoners, 15,000 state and federal troops.

that Pennsylvania had not challenged the federal government's immunity from taxation by a state, but had sought to enforce a tax assessment in a manner which had been in effect in the state for a century.

A second dissent by Justice Owen J. Roberts declared that the appellate court in Pennsylvania was correct in ruling that the tax was neither laid upon nor collectible from the United States. The government had contended that under its cost-plus contract with Mesta, the state tax eventually would have to be paid by Uncle Sam.

• **Two Loopholes Left**—For state and local governments, only two possible loopholes remain through which an agile lawyer might squirm:

(1) The court suggested that a tax laid against the benefits that the corporation derived from using the machine, rather than against the value of the machine itself, might be sustained. Thus, a county probably could tax the leasehold if it was careful to avoid the appearance of taxing the government-owned property.

(2) The court's thinking on the question of tax immunity for federal property still is unsettled and the boundaries are badly defined. The two dissenting opinions pointed out that the decision reversed the court's previous trend, which was toward narrowing the application of the immunity.

In another case along slightly different lines, municipal lawyers might be able to cut the ground from under the Mesta ruling.

Hogs on the Run

Freezing of corn supply and lowering of price ceiling on heavy porkers starts a stampede which overwhelms markets.

If Washington in its jitters about feed supplies (page 50) wanted to scare Corn Belt hog raisers into getting rid of their animals, last week's one-two jolts to the farmer's chin by the War Food Administration and OPA were shrewdly calculated.

• **Hogs on Marginal Corn**—On Monday, WFA froze corn on farms in 125 counties and in elevators (BW—Apr. 29 '44, p21). Thousands of farmers who were counting on eking out their short feed, supplies with purchases from their better-fixed neighbors forthwith began loading their hogs for market.

While stockyards and packers on Tuesday were reeling under the impact of this volume, OPA let out word that on May 15 the ceiling price of hogs between 240 and 270 lb. would drop from \$14.75 to \$14. Thereupon farmers with hogs in this weight bracket (or approaching it) hustled them off to town, utterly swamping the Midwest's marketing and slaughtering facilities. More hogs were driven out of the bushes than anybody expected.

• **Caught Flat-Footed**—The heavy run has continued ever since, with some major markets embargoed, and the rest

overwhelmed. Unlike last winter's glut which everyone awaited impatiently long before it arrived, the current oversupply caught yards operators, commission men, and packers flat-footed at a season when hog receipts are traditionally at the second-lowest ebb of the year.

A less convenient time for heavy marketing of hogs could hardly have been devised. Stockyards, not permitted to buy corn under the freeze order, were unable to scrape up adequate supplies of other feed grain. Chicago's Union Stock Yards is feeding plentiful potatoes. The hogs loved an experimental feed of dehydrated spuds, but eat raw potatoes unenthusiastically by the carload.

• **Capacity Down**—Current hog receipts would not be unwieldy under normal conditions. But packing capacity has measurably shrunk since midwinter. In January, 7,800,000 hogs were slaughtered under federal inspection. By April, the industry's limit was probably 7,000,000 head.

Two bottlenecks—manpower and storage—hold down slaughter capacity. Meat packers not only feel the manpower lack common to all industry, but also are paying for having employed last winter thousands of farmers who now have to go back home to their spring work and their draft exemption.

Also, packinghouse working hours have been generally cut, probably from an average of 60 hr. weekly to an average little above 40 hr., because the men were wearing to a thin edge. Hog supply

been pressing against killing capacity since December, and even a relatively small increase now is too much for comfort.

Product Clogs Storage—Four major factors enter into the current congestion of storage space: (1) the long-continued rate of slaughter; (2) past restraint of civilian consumption due to rationing; (3) point values not being wholly repaired (page 5) until this week; (4) military buying beyond ability to consume; and (5) a slow-down in lend-lease purchases presumably caused by diversion of shipping to invasion needs.

Plan for Jalopies

Auto labor urges centers for reconditioning of worn-out cars on an assembly line basis. Union claims WPB support.

Both labor and management in the automobile industry want the government to take steps to keep existing automobiles on the road until the manufacture of new cars can be authorized. The industry's proposal was to step up the production of replacement parts. Labor suggested that in addition reconditioning centers be set up to tune up old jalopies on an assembly-line basis in view of the shortage of local repair facilities (page 47). Reports from Detroit indicate that the industry isn't ready to go that far.

WPB Interested—Auto labor asked WPB to investigate the possibility of transforming standby war plants into reconditioning centers for civilian and military cars, thus keeping the labor force of such plants intact for possible resumption of war production.

Representatives of the C.I.O. United Automobile Workers left the meeting with the definite impression that Donald M. Nelson, WPB chairman, and Charles E. Wilson, WPB vice-chairman, favored their program. Nelson and Wilson had toyed with the idea of authorizing production of 200,000 automobiles to replace war workers' worn-out cars, but apparently buried the proposal when the industry came out flatly against it unless all of them could move into production simultaneously.

Problems—The reconditioning center idea, if practical, could bridge the gap to volume production and tune the industry up to start off sprinting.

However, there is some question whether the industry would have available the executives needed to staff such an operation. And much time would be wasted unless lines of the same make and model cars could be set up.

Auto labor replies, however, that it would have a stock of reconditioned engines, transmissions, differentials, etc., waiting at these centers to put into the cars as they are rolled in. The worn-out motors and other key parts would then be sent to repair factories to be worked over on an assembly-line basis, to be installed eventually into other cars.

• Postwar Plans—Labor went along with industry in requesting that permission be granted to place orders for machine tools now for use when the go-ahead signal for conversion of the industry is given. Industry's demand that plans for the disposal of government-owned machinery in auto plants be made now also was supported.

The unions' plans for the workers included the usual C.I.O. demand for a guaranteed weekly wage, a suggestion that a 30-hour week might be needed in peacetime to spread the work, and a request that a joint management-labor council be set up in the automobile industry to plan for reconversion.

• Victory Comes First—At the Washington meeting, Wilson and Nelson repeated previous warnings not to expect production of new automobiles until Germany is licked.

Wilson told auto labor that he

thought three reconversion plans were needed:

(1) A plan for carrying out war production successfully by adjusting to changing military requirements and manpower shortages.

(2) A method of carrying out essential civilian production coincidentally with war work by using manpower and facilities freed by a successful invasion.

(3) A long-run postwar plan for full production and full employment. (Still a long way off, Wilson said.)

Whisky in Sight

With grain requirements for industrial alcohol cut heavily, WPB is expected to let distillers resume beverage production.

Agitation for the resumption of whisky and gin production is again reaching a climax, and there appears to be a fair chance that WPB may again give the green light—as it did last September—but that this time the War Food Administration may go along.

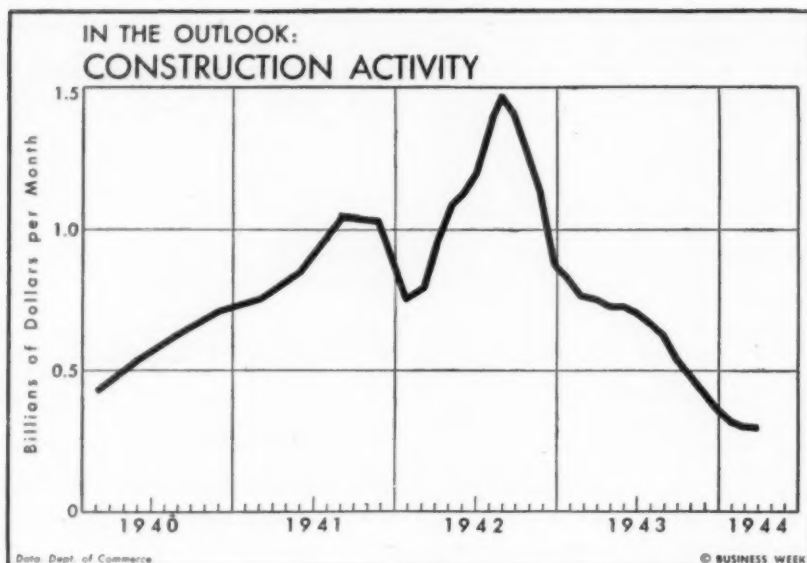
• Distillers Concur—Distillers themselves are for the first time openly advocating a "furlough" to break the back of



CLOSED PORES

Loss by evaporation, leakage, and barrel "soakage" of whisky in bond has always been accepted by distillers as inevitable. It wasn't by Dr. Frank M. Shipman (right), former University of Louisville chemistry professor, who explains his new process of sealing barrels to J. B. Copenhaver, bot-

tling superintendent at Louisville's Brown-Forman Distillers Corp. A member of the concern's research staff, Dr. Shipman seals up pores and cracks with paraffin when barrels are charred, reports a saving of 1½ gal. per barrel of four-year-old bourbon. The industry's loss per 40-gal. barrel averages eleven. The process is to be made available for use by the entire industry.



Construction activity has just about hit its low—around the \$3,600,000,000 annual rate planned by WPB for 1944. It may even rise a bit this summer if the seasonal upturn in regular building lines overshadows the decline

in what remains of war construction. The public-financed part now is little over half the total, and the problem after victory will be quickly to step up private work toward the peak rate of war construction in August, 1942.

the black market, halt the rise of bootlegging, smuggling, and hijacking, and to restore declining federal and state revenues—not to mention slaking the public thirst.

Most distillers were reluctant to plead openly for permission to produce liquor in the midst of war until Secretary of Treasury Henry Morgenthau, Jr., made the proposition respectable at his St. Patrick's Day conference with distillers and WPB officials.

• **Uncle Sam's Stake**—Morgenthau pointed out that the federal government has a \$900,000,000 annual tax stake in the liquor industry.

At the Morgenthau meeting, distillers indicated that 50,000,000 proof gallons of beverage spirits—about one month's production at current rates—would increase the beverage supply to 150,000,000 proof gallons this year and raise the federal income from taxes to \$1,350,000,000.

• **"Furlough" Suggested**—Encouraged by Morgenthau's indirect support, Kenneth S. Baxter, executive director of the Conference of Alcoholic Beverage Industries, argued for a "furlough" before the midyear conference last month of the National Alcoholic Beverage Control Assn., an organization of officials of the monopoly states (the states which sell liquor in state-operated stores).

Baxter made the cogent point that the nation's alcohol output is not going entirely to war industry, but that nearly

a third of it is going to such normal civilian uses as perfumes, cosmetics, and antifreeze; and that distillers—the principal suppliers of alcohol—are in fact the only users not now being supplied. The monopoly state officials heard appeals for a "furlough" from other speakers, then approved a resolution petitioning for early resumption of beverage output.

• **A Charge Backfires**—After the meeting, Sen. Homer Ferguson, R., Mich., member of the Senate committee investigating the whisky shortage, let loose a blast at the industry that promptly backfired.

Ferguson charged that "distillery monopolists" were doing so nicely under their cost-plus-fixed-fee alcohol production contracts with the government that they were not interested in beverage production, bringing to public attention a charge which has rattled around inside the industry a long time—although based on a different premise.

• **Insiders Explain**—Many insiders have claimed that the industry's silence on the subject was due to (1) a feeling among distillers that an industry appeal for a "furlough" might be misinterpreted by the public and lead to repercussions against the industry, and (2) the comfortable and highly profitable position relative to the rest of the industry that companies with large inventories found themselves in when whisky production was stopped.

National and Schenley, the two large-

est American-owned companies, were frequently singled out as opponents of a "furlough"; but at the monopoly convention, National announced publicly that it favored a resumption of production and expected early WPB approval. Schenley officials privately favored a "furlough" but still question the desirability of direct action by the industry.

• **The Industry Speaks**—With every factor in the industry—except nonmember Schenley—finally agreed upon the necessity of forthright action, the Distilled Spirits Institute took quick advantage of Ferguson's statement to announce to Sen. Pat McCarran, D., Nebr., chairman of the Senate whisky-shortage investigating committee, that "the industry would welcome the opportunity to return to its normal beverage producing business even on a partial and temporary basis."

• **WPB Studies Moves**—With Morgenthau, McCarran, state officials, and the distillers pressing for a "furlough," WPB is again considering ways and means of permitting some whisky production without impairing the war effort or incurring WFA opposition.

WPB decided last September that the total alcohol production of the distillers was not needed, and was about to announce a 13-day "furlough" when Marvin Jones of WFA objected to the use of grain for whisky.

• **Less Grain Required**—Since the WPB has greatly reduced its grain requirements by importing molasses in considerable volume from Cuba, Puerto Rico, and other Caribbean areas; and with the Cuban sugar crop up from 500,000 tons to 1,000,000 tons above the original estimates, WPB expects to displace still more grain with molasses.

In addition, WPB has clamped down on the unrestricted importation of cane spirits, with the result that substantial quantities of foreign alcohol will be available for domestic industrial use.

• **Home-Front Moves**—On the home front, WPB has stopped the production of beverage spirits from potatoes, and allocated such production to industrial purposes. Similar allocation of spirits produced from fruit and molasses is contemplated.

Finally, WPB has approved the construction of a large plant in Washington state to make alcohol from sulphite liquor left over from paper manufacturing (BW—Apr. 15 '44, p. 19) and has under consideration a plant in Florida to manufacture alcohol from inedible sweet potatoes. WPB's Requirements Committee has turned down a project for a plant in Oregon to manufacture industrial alcohol from wood waste (BW—Apr. 22 '44, p. 19), but the project is not dead.

Since last September, WPB has re-

panies, needed the grain requirements of its alcohol program a great deal more than 100,000 proof gallons of whisky would require—which may soften the FEA's attitude.

War Alcohol Situation—Industrial alcohol production and imports broke records in March with 51,500,000 gal. turned out by American producers, another 2,000,000 gal. imported from Canada and Mexico. This rate of output is in excess of maximum requirements of about 52,500,000 gal. a month.

After several months of decline, WPB's alcohol stockpile is again increasing and is now near the 100,000,000 gal. mark which WPB alcohol officials would like to have but which may feel is unnecessarily high.

Biggest Obstacle—Only present obstacle to a "furlough" from WPB's standpoint is demand for alcohol to meet the synthetic rubber program. At the rubber plants are now being supplied at their maximum rate of requirements—1,000,000 gal. a day—and the stockpile continues to rise.

Some high WPB officials now feel that Rubber Director Bradley Dewey has jockeyed them into a position where they now have 30,000,000 gal. to 40,000,000 gal. more in the stockpile than can be justified.

Ramifications—A "furlough" would also serve to alleviate the alcohol import problem which is bedeviling WPB and Foreign Economic Administration.

In their effort to secure the maximum amount of molasses and industrial alcohol from the Caribbean, WPB and FEA have recently restricted cane spirits imports for beverage purposes, but so long as no molasses whisky is being produced here, there is a lucrative market for Caribbean rums, gins, and neutral spirits for blending with domestic whisky, which tempts Caribbean producers almost beyond endurance, may result in smuggling.

A resumption of beverage production here would take the market away from Cuban spirits, reduce the beverage import problem.

The Prospects—Early resumption of beverage production now seems likely on the grounds that all essential alcohol requirements are being met, grain requirements for alcohol have been cut drastically, and only production can halt burgeoning black marketing, bootlegging, smuggling, and hijacking.

Only thing that may stop the distillers this time is a White House decision that whisky is risky from the standpoint of next November. In which case the Republicans, led by Sen. Ferguson, might make the alcohol and whisky program another occasion to charge Administration bungling, a possibility of which the White House is keenly aware.

Cartel in Matches?

Antitrust Division sees international conspiracy throttling competition in complaint against eleven corporations.

The ghost of Ivar Kreuger, glamorous Swedish match king of the big boom, stalks through the overture of the latest attack on international cartels launched by the Antitrust Division of the U. S. Dept. of Justice. The complaint was filed in the New York federal court on Monday. It charges seven U. S. and four foreign corporations with conspiring to hold down competition in matches and boost prices by the control of manufacturing and distribution throughout the world.

Kreuger's Example—Historians may date the collapse of the international speculative spree from the day that Kreuger's revolver liquidated his financial difficulties and his own life on the carpet of his luxurious Paris apartment. That was Mar. 12, 1932. But many of the stratagems alleged against the match companies last Monday are spotlighted as deriving directly from Kreuger's vast manipulations.

Defendants in the suit are Diamond Match Co., Berst-Forster-Dixfield Co., Ohio Match Co., Lion Match Co., New York Match Co., Transamerican Match Co., all of New York, and the Universal Match Corp. of St. Louis. Foreign companies involved are the

British Match Corp., London; Bryant & May, London; Swedish Match Co., Jonkopings, Sweden; Eddy Match Co., Pembroke, Canada.

Charges Enumerated—The antitrusters contend that the cartel has been in existence since 1901; that the companies divided the world into noncompeting territories; that they suppressed inventions and improvements; that they controlled patents and raw materials; that the control has extended to imports into the U. S. from Japan and Russia; that match factories in the U. S. have been scrapped by agreement.

The complaint declared that the original combination was reinforced in 1920 by an agreement between Kreuger and his Swedish Match Co. and William Fairbairn, president of Diamond Match. It was Diamond's "peace treaty with the Swedes," according to the Justice Dept.

By this it is alleged that Kreuger called off his threat of vigorous competition against Diamond in the United States and agreed to make Diamond exclusive U. S. agent for the sale of Swedish safety (strike-on-box) matches; that this caused Diamond virtually to destroy its domestic safety match business, including the scrapping of its largest plant at Savannah, Ga.; that Diamond agreed not to manufacture or sell in foreign markets served by Swedish Match; and that in return Swedish Match would not compete with Diamond in North America.

Kreuger Appeased—Later, the suit claims, Kreuger became dissatisfied with his share of the U. S. market. According



VERSATILE TRANSPORT

Fitted with huge pontoons, the Army's C-47 transport makes its maiden takeoff as an amphibian at Oklahoma City and heads for its first water landing at Fort Worth, Tex. Conversion of this military model of

the Douglas DC-3 airliner increases its wartime range and boosts its postwar prospects as a passenger or cargo carrier. To make the change, an Army modification center used the biggest floats of their type and added a dual set of retractable wheels to give the plane stability on the runway.

to the complaint, Fairburn appeased Kreuger by acquiring Ohio Match and selling Kreuger a half interest in the company and allowing Kreuger a third interest in Diamond itself. In return, it is charged, Kreuger scrapped the match factory he was building at Natchez, Miss. The British and Canadian defendants are accused of similar back-scratching arrangements.

As usual, ubiquitous I. G. Farbenindustrie, colossal German chemical trust, comes into the cartel picture. The complaint asserts that in 1922 Diamond became exclusive agent in the U. S. for I. G.'s chlorate of potash (a match-head ingredient), that in return Diamond virtually ceased the manufacture of this chemical in the U. S., and adds that "as a result of the scrapping of American plants, this country had practically no production of chlorate of potash at the outbreak of war" for the making of ammunition, flares, and other signals.

● **Acute Shortage**—American troops have been using American matches abroad, but the shortage has been acute. This has been especially true in Latin America. Restrictions on neutral Sweden made it extremely difficult for Swedish Match to supply its markets in Latin America. After negotiation, the complaint says, Diamond sold to Swedish Match supplies which Swedish

Match then sold in its Latin-American market—territory barred by the alleged agreement to U. S. manufacturers.

There is no evidence that the match companies ever were worried by the cigarette lighter, but the "everlasting match" was a different matter. This is a match, sold in Europe, that can be used repeatedly. The match companies are charged by the government with having bought up the rights to the everlasting match and with having suppressed it in favor of the one-time light.

Officials of Diamond Match decline to comment on the case at this time.

Surplus Pricing

Clayton sets up policy for sale of idle inventories resulting from the termination of government contracts.

Will L. Clayton and his Surplus War Property Administration have worked past the planning stage and are now beginning to set up machinery for the disposal of government-owned surpluses.

First step was the announcement last week of a pricing policy for sale of surpluses resulting from termination of

government contracts. This will be followed within a couple of weeks by a broad ruling on pricing surplus stock held by the procurement agencies.

● **Termination Surpluses**—Eventually the distinction between surpluses resulting from termination and property declared surplus by the procurement agencies may be lost in the general shuffle that will accompany liquidation of the war program. For the present, however, the Surplus Property Administration intends to keep them separate.

Raw material and semifinished materials that result from contract termination will be sold by the procurement agencies (or by contractors for the account of the procurement agencies) if there is a market for them.

● **Declared Surpluses**—In this respect the rules for handling termination surpluses differ sharply from those that will be established for declared surpluses.

All sales of declared surpluses will be made by the five disposal agencies: Reconstruction Finance Corp. for capital goods, Treasury Procurement Division for consumer goods, War Food Administration for food, Maritime Commission for ships, and Foreign Economic Administration for goods sold abroad.

● **Reasons for Distinction**—This policy distinction between termination surpluses and declared surpluses follows from the fact that inventories at the time of termination will be in the hands of contractors and to turn them over to the disposal agencies would mean an extra change of hands.

The present plan is for procurement officers to sell them from the contractor's premises instead of accepting actual delivery and then selling them.

● **Price Rules Harmonize**—In the original division of authority, termination surpluses were assigned not to Clayton's organization but to John Hancock's Joint Contract Termination Board. Hancock asked Clayton to set the pricing rules so that they would be consistent with the regulations worked out for declared surpluses.

The policy, as Clayton laid it down, leaves contracting officers a good deal of latitude to decide whether goods should be sold and how much they should bring.

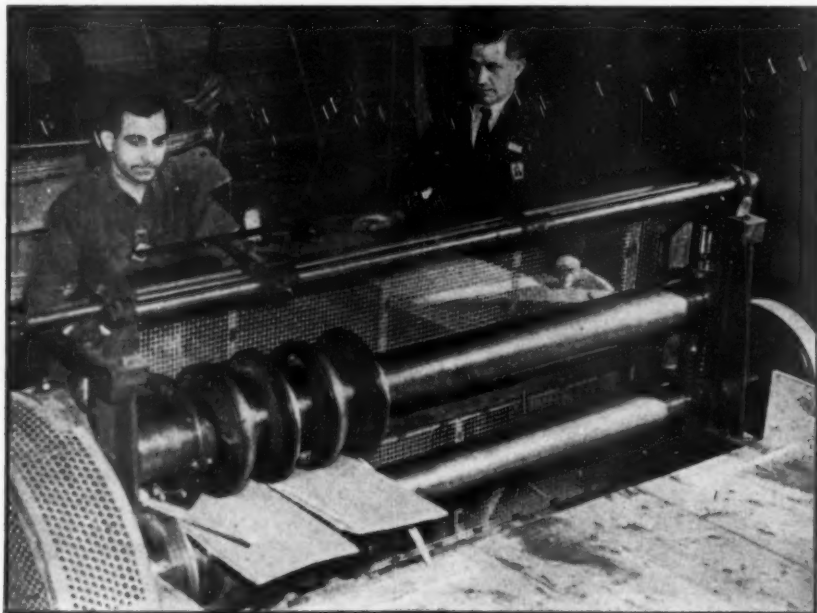
● **Basic Rules**—As a general guide, Clayton laid down four basic principles:

(1) Quick clearance of plants for resumption of war production or essential civilian production as soon as possible after termination of a contract.

(2) Sale of surpluses to the contractor or to other buyers who will use the goods themselves.

(3) No sales to speculators.

(4) No sales without an adequate test of the market. This means that a contracting officer at least must consult recognized trade



ARMY ECONOMY

By cutting its own cardboard, the Army Quartermaster Depot at Philadelphia is cutting costs and making a "paper" profit besides. Strips used in baling uniforms for shipment for-

merly were purchased for 3½¢ each; now they're cut from cartons in which supplies arrive. The cutter built by S. & S. Corrugated Paper Machinery Co., Brooklyn, N. Y., produces \$300 worth of strips daily from boxes that would bring only \$45 as salvage.



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Adds Pittsburgh Plant

Introducing Ryerson's new steel-service plant. Born to keep steel moving to the hundreds of industrial plants in the Pittsburgh area. A fast, dependable steel-service to relieve production bottlenecks and to keep over-worked plants and equipment going in a vital territory.

This new service plant is the eleventh in the Ryerson network that had its beginning over 100 years ago. With the cooperation

of the other ten Ryerson plants it is prepared to furnish everything from structurals to stainless . . . in thousands of kinds, shapes and sizes. Stocks are ready for immediate delivery. No matter how large or complicated your steel needs may be, Ryerson can quickly handle and deliver your orders. Call Ryerson first. You'll get the steel you want . . . exactly when you want it.

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LINDSAY STRUCTURE BODIES FOR YOUR TRUCKS MEAN—

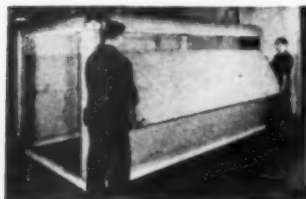
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sources and check with several possible bidders. It does not mean that he must advertise for bids in all cases.

• **Best Market Price**—Specifically, the rules provide that raw materials must be sold at the going market price. Other materials are to be sold at the best price obtainable, but this may not be more than 75% of either cost or market price, whichever is less. Scrap may be sold at the going market price.

If contracting officers cannot dispose of the surpluses on these terms, the regulations map out additional steps to be taken. Raw materials are to be turned over to the regular disposal agency which will handle them like any other surplus. Other material may be offered for sale at the best price obtainable to buyers who will consume it themselves or who will agree not to resell it.



SALES PROMOTER

Heading the Treasury's new unit to handle disposal of surplus consumer goods is Ernest L. Olrich, president of Munsingwear, Inc. The unit's sales are already hitting \$12,000,000 a month and are expected to run into billions after the war—but Olrich has a reputation for energetic dexterity. While boosting Munsingwear's sales from 1938's \$4,700,000 to 1943's \$16,000,000, Olrich directed the War Relocation Authority's industrial training program in six states, was regional director for Smaller War Plants Corp., Minnesota's defense coordinator and postwar planning chief, and a member of OPA and WPB advisory committees for his industry.

Idea Corner

For Postwar Package Planners

MACARONI THAT FASCINATES... TOWELS THAT TALK... PEAS THAT PEEK...



IDEA NO. 1 A variety show is a good way to bring in the crowds. Why not introduce your whole "family" to the shopping public through showmanship in packaging? Let folks see. Stimulate their imagination. Then watch shoppers go *buy*!



IDEA NO. 2 Perhaps your product could talk as well as these towels. More and more consumers want *informative labeling*—plus visible unit packages that *show the quality* of the product. Then you cash in on human curiosity.

Basic Themes of Postwar Merchandising

Here are six fundamentals that will help to lower postwar distribution costs and speed up turnover. Use them to check *your* postwar package plans.

1. **SELF-SERVICE:** Emphasis on self-selection and display value.
2. **CONVENIENCE:** Size, shape, quantity, ease of use are predominant factors.
3. **INFORMATIVE LABELING:** Need for concise information, terse selling message.
4. **IMPULSE BUYING:** A high percentage of all buying done on impulse.
5. **PROTECTION:** Adequate protection geared to rapid turnover.
6. **VISIBILITY:** 85% of all buying done through the eyes. Visibility of primary importance in the package of the future.

Would you like to see more postwar packaging ideas? Just write: E. I. du Pont de Nemours & Co. (Inc.), Cellophane Division, Wilmington, Del.

Du Pont Cellophane

Better Things for Better Living . . . Through Chemistry

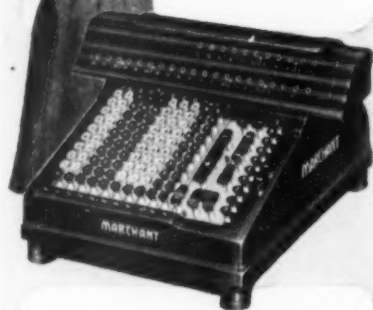


IDEA NO. 3 Funny thing about a window—it works both ways. Product peeks out—shoppers peek in. Stimulates impulse buying—lets shoppers see what they're getting. And good appearance gives dealers an extra talking point.

VISIBILITY... a powerful force in modern merchandising

"I like MARCHANT

Because I can set any and all amounts with just one style of keyboard-fingering! Just as in typing, my fingers find the keys without conscious mental effort!"



"My Boss likes MARCHANT

Because he values its

**20 POINTS
OF SUPERIORITY** including
**AUTOMATIC SIMULTANEOUS
MULTIPLICATION"**

Eliminates the customary delay! The answer is formed *during*... not after... the time that the multiplier is being entered! Seconds saved on every problem mean valuable time saved every day.



Deliveries according to WPB schedule.



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profit. Scrap will be sold on a bid basis at the best price obtainable, but the contracting officer must reserve the right to reject all bids if the best price is not adequate in his opinion.

• **Rules on Small Lots**—In handling small lots, contracting officers have even wider discretion. Materials of any type may be sold at the best price obtainable, no matter how low, if they result from termination of a contract or subcontract which involves a claim against the government of less than \$10,000. The same thing goes for materials costing less than \$1,000.

As a rule, surpluses resulting from termination will consist only of raw materials, semifinished goods, and scrap. Hence, the rules make no provision for sale of consumer goods. All sales will be subject to OPA price ceilings and WPB controls.

Credit Guards Up

Fear of breakdown when government controls are withdrawn impels credit men to plan for voluntary regulation.

Retailers and finance agencies, expecting an unprecedented demand for consumer credit after the war, are concerned over the danger of a breakdown of the credit structure when conditions change and government regulation of credits is withdrawn.

• **Credit Is Sound**—While consumer credit is now in the soundest condition it ever has been, credit experts realize that the situation can be reversed if the consumer's long-deferred desire to buy is allowed to outrun his ability to pay.

Approximately 60% of all retail sales in prewar years were made on the basis of credit in some form or another. Today only 40% are on credit. The outstanding consumer debt has been cut in half since Jan. 1, 1942, and the total of outstanding charge accounts has been substantially lowered.

• **Three Causes**—These satisfactory conditions have resulted largely from three things: the scarcity of merchandise, increased public income, and the enforcement of Regulation W by the Federal Reserve System, under which the down payment on instalment purchases is increased, periods for payment reduced, and charge accounts are frozen if unpaid one month following the regular monthly payment date.

Realizing that all three of these credit controls may disappear overnight with the ending of the war emergency, the National Retail Credit Assn. is seek-

KEEPING CUFFS CLEAN

War workers, even those with inflated incomes, are beginning to encounter difficulty in obtaining retail credit in many areas. Credit men explain that special precautions are being taken against granting credit beyond the potential ability of the worker to pay.

Still greater caution will be exercised, they declare, if long-wanted merchandise begins to reach the market at a time when war workers' incomes are reduced or rendered less certain by reconversion of war plants to manufacture of civilian goods.

Symptomatic of the caution is a growing unwillingness on the part of retailers to accept Social Security card identification for check-cashing purposes. Too many complain that they have been stung by honoring cards issued in assumed names.

ing, through postwar planning committees in 125 retail centers, voluntarily operated community credit control plans which will prevent a return to prewar credit evils.

• **Postwar Control Shunned**—Tentative reports from some of these committees approve the provisions of Regulation W with certain modifications. All agree that the government should, however, have nothing to do with credit control beyond the emergency period for which Regulation W was intended, that such control in peacetime is neither desirable nor legal.

The association declares that the Sherman antitrust act prohibits the enforcement of any credit regulations by the national organization, so it is basing its hopes for a sound postwar credit system on the voluntary policies of retailers and credit agencies in each community.

The credit men hope to accomplish, among other things, the elimination of instalment selling without down payment and to reduce the debt-reduction periods on instalment sales. Frankly hostile to government financing in any form, they blame the prewar breakdown of the retail credit structure on the financing of refrigerator purchases by the Federal Housing Administration without down payment and with payments spread over three years.

• **Credit Come-on Opposed**—The association is opposed to the advertising of credit terms by manufacturers, distributors, and retailers. The tendency to sell "easy" terms rather than to emphasize the value of merchandise was a con-

It hasn't come to this yet, but . . .



1.



2.



3.

No, it hasn't quite come to this at the Hotel Pennsylvania.

In fact, we're managing very well indeed, all things considered.* But every so often, we run into a little problem of simple but inflexible arithmetic. For instance:

The Hotel Pennsylvania has 2200 rooms. No more, no less. But in these war-busy days, there are usually more New York visitors seeking these comfortable rooms than there are rooms available.

When that happens, somebody must be disappointed. And naturally, the folks with confirmed reservations have priority.

You can help make things easier all around by observing these "Three Golden Rules for Wartime Travelers":

- 1—Make reservations well in advance, specifying hour of arrival and day of departure.
- 2—Cancel unwanted rooms promptly.
- 3—Release your room as early as possible on day of departure.

You'll be helping the *other fellow*, to be sure. But sooner or later, the other fellow's thoughtfulness will help *you*.



**Hotel Pennsylvania rooms and beds are still the most comfortable you can find. The meals are still delicious, thanks to skillful, ration-wise chefs. And every important Statler service is still maintained at gratifyingly high efficiency.*

YOUR DOLLARS ARE URGENTLY

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Time Saving Methods Cut Costs for Users of ACME CASTINGS...



These workmen, pouring the core for an aircraft cylinder head aluminum casting, typify the cost-saving skill and precision prevailing throughout the Acme foundry.

A specially developed Acme technique of pouring directly in the core assembly for a cylinder head aluminum casting reduced the amount of metal used in pouring from 228 to 82 pounds—a big saving in metal as well as a saving in time. Such advanced methods, plus strict laboratory control and rigid inspection, insure the quality and value of every Acme Aluminum Casting.

Acme complete service to the metal-working industry includes special tools designed to your requirements, and recommendations of Acme engineers. Your inquiry will receive prompt attention.



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tributing factor, credit men say, to the unsound retail credit conditions which existed in many areas prior to the war. The opinions of the postwar credit planning committees will be collated at the national convention of the association at Milwaukee next month and crystallized into a voluntary formula for credit control which credit men hope will preserve the present sound credit condition.

No Power Deal

Offer for Puget Sound utility rejected. Bonneville's chief says condemnation proceedings on rival lines may be forced.

A \$90,000,000 offer for the Puget Sound Power & Light Co. in the state of Washington apparently is not going to reach the point of negotiations.

The privately owned utility has rejected the offer, which was made by Dr. Paul J. Raver, Bonneville power administrator, acting as negotiator and agent for the public utility districts in the company's service area, the city council of Seattle, and the U. S. Secretary of Interior.

• **Authority Challenged**—Frank McLaughlin, president of Puget Sound Power & Light, terming the offer "grossly inadequate," wrote Raver that he would give earnest consideration at any time to a "fair purchase proposal" which was accompanied by proof of legal power to acquire the electric properties, and evidence of ability to finance the purchase.

Raver countered that rejection of the offer may force the public power groups to take condemnation proceedings or construct competing lines. Such methods are costly, he said, but may be the only course left to "carry out what the people have asked."

• **Quits Negotiation**—Raver defended the offer as fair and in harmony with the findings of the Securities & Exchange Commission. He asserted that any higher price would be grossly unfair to the electric consumers of the region.

Any further action will be up to the Seattle municipal light system, or to the PUD in the company's service area, Raver said in announcing his withdrawal as negotiator. One of the 18 PUDs (the Skagi County PUD) making the offer also withdrew with Raver.

• **PUDs Have Power**—In challenging Raver's power to make a solid offer for the properties, McLaughlin obviously referred to restrictions imposed by Congress on the Bonneville Power Admin-

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ation's authority to buy privately
owned distribution systems.
No question was raised of the author-
ity of the PUDs (with Raver acting as
their agent) to buy the utility without
approval of a bond issue by voters of the
PUDs (BW-Apr. 1'44,p34). That issue
was settled by a state-wide vote in 1940,
when a proposal sponsored by the
privately owned utilities was soundly
defeated, leaving the local public
agencies free to purchase or condemn
private utility properties or to build
competing lines.

Interested in Dam-Incidentally, al-
though Bonneville had a hand in the
offer for Puget Sound Power & Light
its interest was primarily in Rock Is-
land dam, the further development of
which could be coordinated with the
other government projects on the
Columbia River, it took no part in
initiating or aiding the ill-fated proposal
of Hood River County Public Utility
District to spend \$175,000,000 in the
wholesale purchase of utilities.

CANOL PIPELINE OPENED

Canol, that controversial pipeline and
refinery project in northern Canada
(BW-Dec. 4'43,p20), opened officially
this week. Army Service Forces built the
four-inch, above-ground, 595-mile pipe-
line between wells at Fort Norman and
a refinery at Whitehorse, Yukon Terri-
tory. Standard Oil Co. of California
erected the refinery. Imperial Oil, Ltd.,
an affiliate of Standard Oil Co. (N. J.),
is the oil producer at Fort Norman.

In weather that sometimes reaches
-70F, it seems strange that a pipeline
would be exposed to the elements. Engi-
neers say it's the sensible way. Arctic
oil has much of the wax removed natu-
rally in production by the cold earth,
and the pour point of Fort Norman oil
is about -70F. Furthermore, the frost
line is about 30 ft. underground, so pipes
might as well be on the surface.

Capacity of the line is rated at 5,000
bbl. daily. Aided by existing storage,
Imperial Oil seems to believe production
will be available for full operation. The
refinery will supply air fields between
Fairbanks and Edmonton, Alta., and
trucks operating on the Alaska highway,
through a 1,500-mi. network of dis-
tribution lines.

AMPLIFICATION

Those 35-lb. galley (kitchen) units
originally designed for Martin's Mariner
patrol bombers and now, after a cut in
the planes' weight, offered for sale in
the aircraft manufacturers' disposal of
surplus inventory (BW-Apr. 1'44,p96)
were built by the Tappan Stove Co.,
Mansfield, Ohio.

Crusader Quits

Walter G. Campbell, head
of Food & Drug Administration,
retires. He nominates Dr. Dunbar
to carry on policies.

Walter G. Campbell, the man who
carried on the late Dr. Harvey W.
Wiley's crusade for pure food and drug
legislation and transformed it into a
smooth-running government operation,
resigned as commissioner of Food &
Drugs effective Apr. 30. He became
eligible months ago for full government
retirement benefits but was expected
by Washington insiders to stay for the
duration.

• **Suggests His Successor**—For 37 years
Campbell's policies and personality
dominated the Food & Drug Adminis-
tration, the federal agency which con-
trols the label accuracy and content
purity of all foods, drugs, and cosmetics
that move in interstate commerce.

Before resigning, Campbell recom-
mended Dr. Paul B. Dunbar, associate
commissioner, as his successor. Dr.
Dunbar is expected to get the job un-
less Federal Security Administrator Paul
V. McNutt, who is top boss over F&DA,
decides to make a political plum out
of the post.

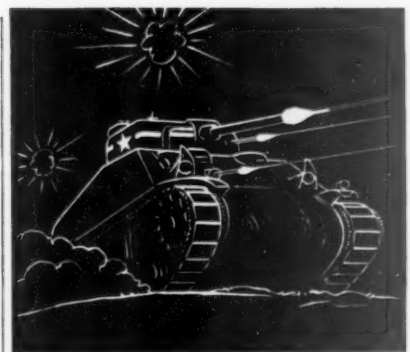
• **May Set a Precedent**—Dunbar joined
federal government's food and drug con-
trol work one month after Campbell,
and he served through the intervening
years as Campbell's closest aide. Al-
though he too is entitled to full gov-
ernment retirement benefits, Dunbar is
expected to remain at the post for some
time if he should get the job.

Apparently Campbell's strategy in
pushing Dr. Dunbar as his successor is
to establish the precedent of naming
F&DA heads from within the organiza-
tion. If Dr. Dunbar gets the job, he
is expected to groom one of the younger
men on the staff as his successor—prob-
ably Charles Crawford, recently named
assistant commissioner.

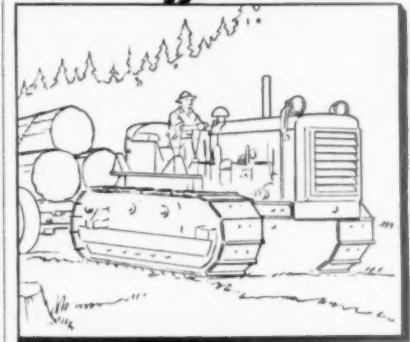
• **Drafted First Libel**—Starting his
career as a lawyer in Louisville, Ky.,
Campbell became interested in food and
drug control work when he was asked
to handle some state regulatory cases.

After Dr. Wiley succeeded in push-
ing through the pure food and drugs
law in 1906, Campbell came to Wash-
ington in June, 1907, as one of the
first group of inspectors hired by the
old Agriculture Dept.'s Bureau of
Chemistry, which was given jurisdiction
over the new food and drug control
work.

When Food & Drug decided to make
its first important seizure—a shipment



Warfare TO



Welfare!

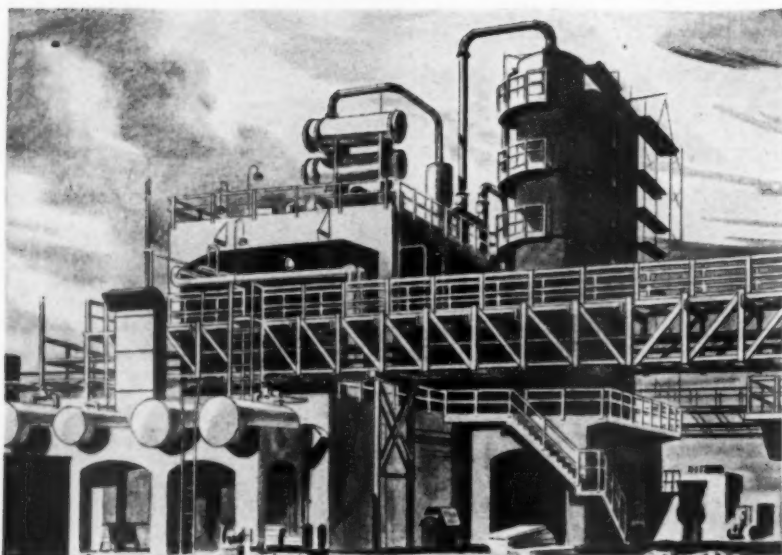
RODGERS EQUIPMENT is
now doing yeoman service on
our fighting fronts. Its duties vary
from repair of embattled tanks to
servicing equally vital crawler type
tractors building roads, airfields,
bridges and army camps.

We hope it will not be long before
Rodgers Track Presses will be giving
the same yeoman service to tractor
equipment engaged in work here at
home for human Welfare. We are
looking forward to a tremendous
construction development immedi-
ately after the war, and we wish to
assure tractor owners and distribu-
tors everywhere that we will be ready
to take care of their track press ser-
vice requirements when that time
comes. Rodgers Track Presses are
available now on priority for essen-
tial construction jobs.

If it's a Rodgers, it's the best in Hy-
draulics. Rodgers Hydraulic Inc., St.
Louis Park, Minneapolis 16, Minn.



HYDRAULIC Inc.



Flame-proof wood helps U. S. deliver "home grown" rubber

SYNTHETIC rubber plants are using flame-proof wood in their stairways, platforms, supports, walkways and railings. Wood is light in weight, easy to handle and erect. It goes up fast.

MINALITH* fire retardant, driven deep into the wood by vacuum-pressure treatment, enables it to stand up under flash fires. It won't carry fire, simply chars under continued exposure to flame. Structural members retain their high strength without sudden collapse when exposed to flame.

WIDELY USED in the war effort for structures where fire hazards exist—warehouses, blimp hangars, loading platforms—this flame-proof lumber promises to be equally valuable in postwar construction. So, too, does Wolmanized Lumber*: ordinary wood made highly resistant to decay and termite attack by impregnation with Wolman Salts* preservative. A long history of successful performance proves the reliability of the vacuum-pressure process employed in treating with either compound.

CONSIDER Minalith-treated lumber as a means of combating fire: Wolmanized Lumber for protection against decay and termite attack. All of the usual advantages of building with wood are retained. The wood is clean, odorless and paintable. These two types of treated lumber will be available, just as soon as the war permits, through regular trade channels. American Lumber & Treating Company, 1656 McCormick Bldg., Chicago 4, Illinois.

*Registered trade marks

WOOD THAT'S



FOR SAFETY AND ENDURANCE

AMERICAN LUMBER & TREATING COMPANY

of alleged adulterated whiskey—Campbell went to Baltimore to help the federal district attorney prepare the case. It developed that the prosecutor couldn't figure out how to draw the legal papers seizing the shipment in the name of the government. Without a moment's hesitation, Campbell sat down and wrote out the first federal government food and drug label. This procedure, borrowed from admiralty law, is still being used today.

• **Urges Unified Control**—In recent years, Campbell has turned down a number of "write your own ticket" offers to go with industry. His resignation was accompanied by clear indications that he plans to retire from active life and will not listen to any offers to become an "industry consultant."

In what turned out to be his swan song—a speech delivered several weeks ago before an association of state food and drug regulatory officials—Campbell called for unification of federal government control over foods, drugs, and cosmetics.

• **Jurisdictional Fight**—As a result of the compromise that ended the five-year fight over new food and drug legislation, the 1938 law limits F&DA's jurisdiction to labeling and gives the federal trade commission jurisdiction over advertising. Industry in general, and the proprietary drug industry in particular, supported FTC in its fight to keep control over advertising. Major reason for this industry position was that FTC's punitive powers were limited to the issuance of cease and desist orders while F&DA's law includes criminal as well as civil court penalties. In addition, at that time, Food & Drug was widely regarded as the reform organization and FTC as the more middle-of-the-road group, susceptible sometimes to political pressures.

• **Hasn't Worked Out**—To date, the split in jurisdiction has not worked out. By one device or another, FTC has edged itself into labeling control while Food & Drug has won court decisions permitting it to utilize advertising as a means of determining what a manufacturer means by his labeling.

In addition, FTC has now become, in a sense, the reform organization, issuing cease and desist orders which are subject only to the most limited type of federal court review. This shifting of positions has evolved into a situation in which proprietary men prefer Food & Drug to start a case because this agency must prove its position before an impartial court while FTC acts as its own prosecutor, jury, and judge.

• **Greatest Achievement**—Campbell's greatest achievement is the amount of public protection he could squeeze out of the small appropriations which Con-

gress gave him. In recent years, his office has had to get along on about \$2,000,000 annually.

As the years rolled by, industry began to accept the F&DA as part of its way of doing business. In recent years, some segments of the food and drug industries have gone to Congress to urge specific legislation under which they would pay the full costs of certain specialized types of regulation of their operations.

Fruit via Mars

Glenn L. Martin asserts giant flying boat has proved that perishable cargoes can be handled profitably by airplane.

When Glenn L. Martin's massive flying boat "Mars" splashed gently down upon San Francisco Bay one day last week, the possibility that air transportation of perishable foods would become a big business appeared to have advanced beyond the wishful thinking stage.

Forecast of Costs—Air cargo experts in recent months had predicted profitable air delivery of fresh and frozen fruits and vegetables when the cost of transportation could be lowered from 40¢ a ton-mile, indicated by some airlines, to 15¢ a ton-mile or under (BW-Apr. 1 '44, p. 21).

Martin announced that:

(1) The Mars, carrying cargo for the Naval Air Transport Service between San Francisco and Honolulu, has shown an operating cost of less than 15¢ a ton-mile.

(2) The 20 advanced-version Mars boats ordered by the Navy will have a ton-mile operating cost of 10¢, at 80% of load capacity.

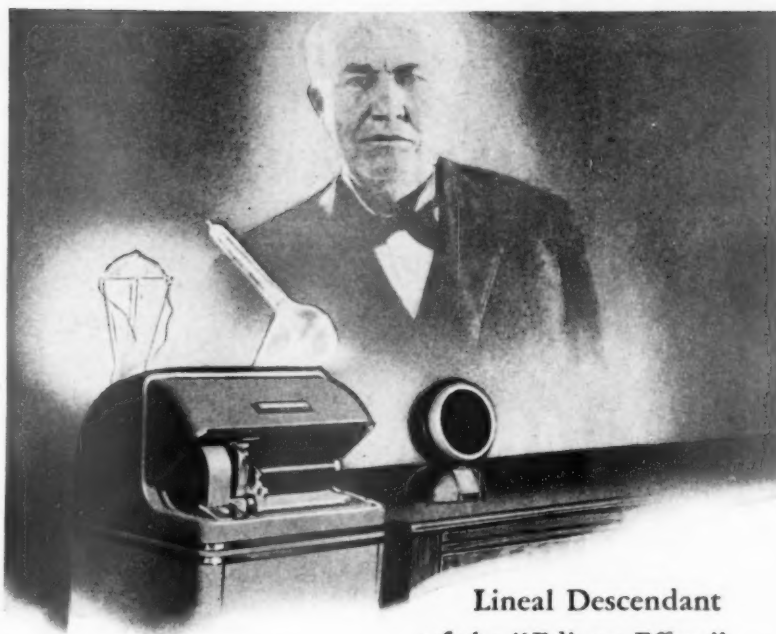
(3) An air cargo operating cost of 7¢ a ton-mile is within reach.

(4) Operating costs of the Mars are just about reaching the present cost of shipping perishable fruits and vegetables.

(5) With a 10¢-a-ton-mile operating cost, "we can underbid the transportation of frozen foods by a large margin."

Sky Refrigerator—The builder of the Mars bases his predictions on the future of air transportation of perishable foods on figures showing that the rail express shipment of deep-frozen perishables averages 16¢ per ton-mile (express charges plus the cost of deep freezing prior to shipment).

Martin's plan, now under development by an air cargo research division of his Glenn L. Martin Co., eliminates the preliminary freezing of perishable foods at the point of loading. Under present plans, when a cargo plane reaches freezing altitude, the forward hatches



Lineal Descendant
of the "Edison Effect" ...

THE NEW EDISON ELECTRONIC VOICewriter

If Thomas A. Edison were here today, he probably would consider the Edison Electronic VOICewriter one of the finest fruits of his discovery of the now famous "Edison Effect."

For here is truly an amazing new servant of business—an electronic device which not only frees precious executive and secretarial time for extra accomplishment, but also serves as infallible reporter of important interviews and conversations.

It is impossible to foresee the full impact of this revolutionary elec-

tronic device upon postwar office procedure. But so important is the development, that some Edison Electronic VOICEWriters are now available, with War Production Board approval, for commercial use.

Ask an Ediphone representative to give you all the facts about the new Edison Electronic VOICewriter now—and tell you how he can take care of your immediate needs for man-and-woman-hour saving Ediphone equipment. For convenience, use coupon below.

EDISON VOICewriter Ed i p h o n e

THOMAS A. EDISON, INC., Dept. C5, W. Orange, N. J.
I would like to know more about the new Edison Electronic VOICewriter and how it can save time and streamline business operation.

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Address.....
Company.....

"Out of the mind—
into the mike"

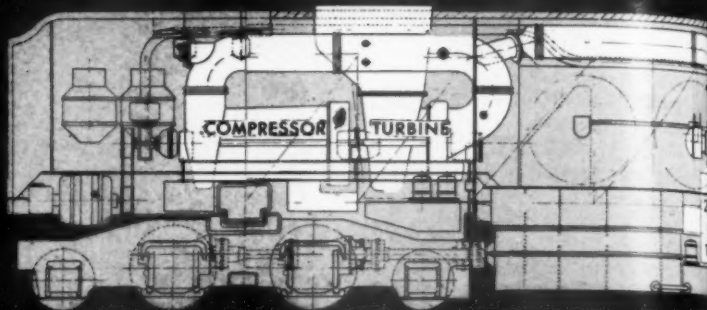


How to Cut a Locom

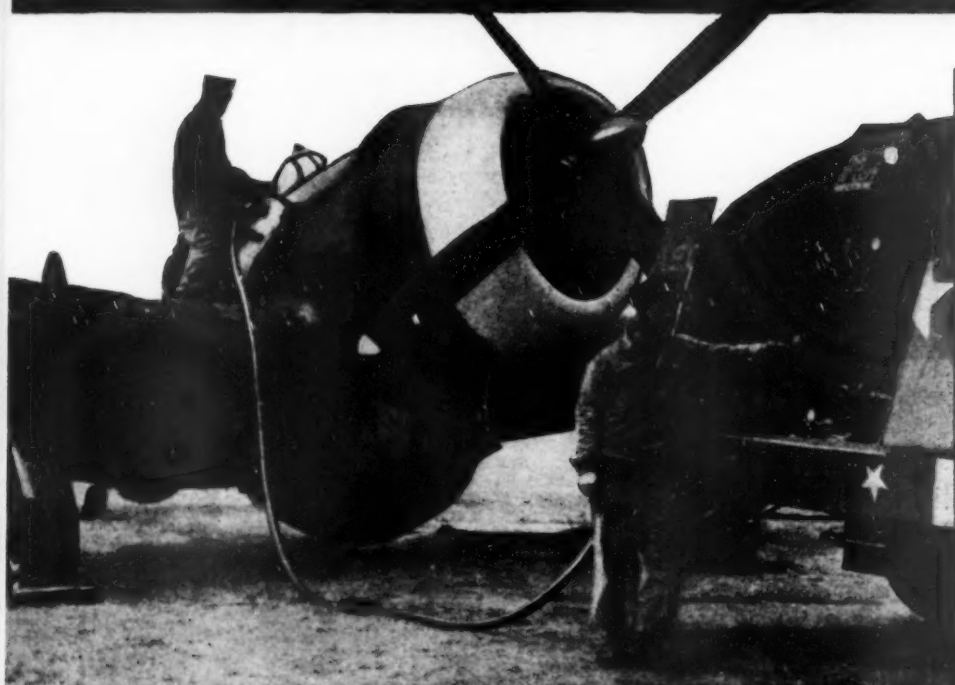
YET MAINTAIN ITS



**PLAN TO USE
ALLIS-CHALMERS
GAS TURBINES!**



Actual Blueprint of a 5000 horsepower A-C Gas Tur



Today, A-C built
Gas Turbines help
boost output of
U.S. super aviation
fuel—promise to
revolutionize power
production in many
fields after the war!

"ENGINEERING THAT
AIDS ALL INDUSTRY FURTHERS
AMERICAN GOOD LIVING"



OVER 1600

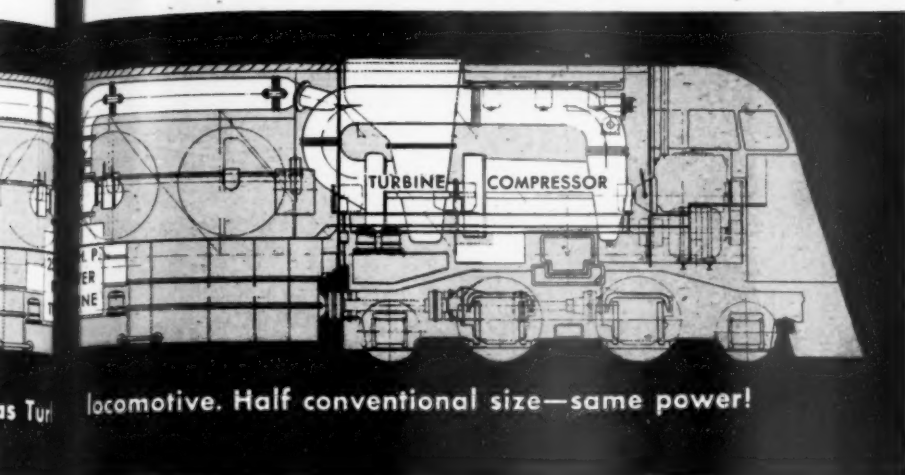
PRODUCTS

*Supplying the World's
Industrial*

ALLIS-CH

otive in Half-

TOTAL HORSEPOWER!



locomotive. Half conventional size—same power!

"TORNADO IN A BOX!"... "Simplest, most compact engine ever invented!"... "Biggest power story in 50 years!"... That's how engineers describe the sensational, new gas turbine... now in production at Allis-Chalmers!

It's already helping to win the war!

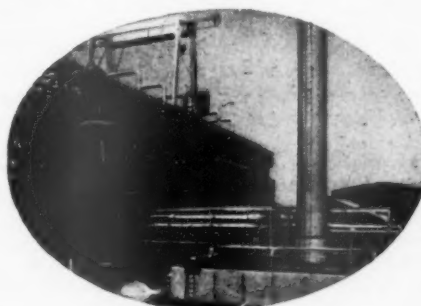
Today, A-C built gas turbines help produce precious power, in U. S. oil refineries. Result: 100-octane gasoline flows faster to U. S. fighting planes!

In the future, designers see: Power plants for locomotives that take up half the space yet deliver the same power as conventional engines!

Gas turbine-propelled ships that carry 100 tons more cargo without increasing length or displacement!

Lower maintenance, cheaper postwar production of things American buyers need and want!

Today, Allis-Chalmers has more gas-turbine units in use than all other companies combined—and with 1600 different products in the battle of production, is building the greatest wealth of experience in the capital goods field. Experience that will serve American industry well in the peacetime era ahead!



A-C Gas Turbines have already been installed in modern oil refineries like this.

VICTORY NEWS

24-Hour-A-Day Welder: A new A-C welder—the Ampac "400" with sufficient capacity to use $\frac{1}{4}$ " rods 24 hours a day—has recently been announced by Allis-Chalmers.

The Ampac "400" is simple in design—rugged in construction and covers a welding range of 50 to 500 amps in 8 easy turns of control wheel. Cuts welding time—speeds output! For further information, write for bulletin B6302, Allis-Chalmers Manufacturing Company, Milwaukee 1, Wisconsin.

Front Line Action With The Seabees: In the South Pacific, big Allis-Chalmers crawler-type tractors have seen plenty of service clearing invasion roads—hacking airstrips out of jungles—filling shell craters.



At times, these 14-ton Diesel-powered giants have operated in temperatures as high as 175° in the sun... and in Alaska and the Aleutians, at 65° below zero!

What Are Your Marine Needs? Allis-Chalmers has immediate capacity available for all sizes of Surface Condensers—built to either Navy or A.B.S. requirements—with or without Steam Jet Pumps.

Also capacity in varied amounts for hollow-bored and solid shafting, special forgings, large iron castings, engine frames, beds, etc. Check with us today.

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8:30 P.M. E.W.T.—SATURDAYS



BLUE NETWORK—COAST-TO-COAST



"Right here, MR. PRESIDENT..."

"At the STRATEGIC DISTRIBUTION CENTER of the INDUSTRIAL NEW WEST, the most favorable location for low-cost distribution . . . by rail, by air, by water, by highway.

"You see, Metropolitan Oakland Area is the western terminus of three transcontinental railway systems. And it is served by transcontinental airlines which are planning greatly expanded service after the war. This will be a big peacetime center for air freight to all parts of the Orient . . . and the World.

"This fastest growing industrial center is also a world port, with deep-water harbors and concrete and steel terminals and warehouses unexcelled in the West. Postwar trade with the Orient will provide an enormous outlet for your goods.

"As terminus of many contract and common carrier truck lines, Metropolitan Oakland Area is exceptionally well qualified to serve your company by distribution over the Coast's 27,000 miles of surfaced highways. Terminus, too, of four transcontinental bus lines."



150 nationally-known manufacturers have plants here. This is Standard Brands of California.

From many other standpoints Metropolitan Oakland Area is the ideal location for your western plant. If you are working on West Coast peacetime plans, tell us your requirements and we will submit, without expense to you, a *Confidential Special Survey* compiled especially to fit your operation. It will pay to have all the preliminaries settled so you can let contracts for your new plant as soon as the war is over.

Our free booklet, *Facts and Figures*, gives a brief outline of the highspots of the Metropolitan Oakland Area story. May we send you a copy?

METROPOLITAN OAKLAND AREA
387 Chamber of Commerce Building
Oakland 12, California

METROPOLITAN OAKLAND AREA
CALIFORNIA



Mainland Gateway to the Postwar Markets of the Orient

The NATURAL Industrial Center of the NEW West

would be opened to permit air to go into the cargo space and to circulate around the perishables carried. Food would thus be frozen, and delivered frozen, without an ounce of ice or mechanical refrigeration apparatus aboard.

● **Potential Cargoes**—Immediate potential air cargoes are strawberries and similar produce, and the development of new U. S. market for stalk-ripened South American bananas.

● **Defends Flying Boats**—What is more immediately significant to the eastern aircraft factory presidents who were invited by Martin and NAIS to ride the Mars between meetings of the Aeronautical Chamber of Commerce in Los Angeles (BW-Apr.29'44,p36) was the indication that the majority of plane makers may have been guessing wrong in thinking the day of the flying boat had ended.

Martin told them that the cargo capacity of big planes is about equal to flying boats and land planes up to a gross weight of 120,000 lb. From there on up, in gross weight, the flying boat outstrips the land plane.

● **No Limit to Size**—Martin is convinced that when bigger cargo and passenger planes are built, they will have to be flying boats to win greatest operating economy.

He stands ready to dispute claims that the size of airplanes will be limited, and insists that there is no limit to the size to which a flying boat can be built. According to Martin, the secret rests in designing the airplane to carry a large portion of cargo within the wing, extending well out toward the wingtips, so that load stresses will be distributed widely.



At the helm of his 35-ton Mars flying boat, Glenn L. Martin steers a course toward seaplane cargo service, and transit-frozen vegetables and fruits.

New Fish Sought

Shark livers, source of vitamin A, are becoming scarce. Scientists urged to explore for species in deeper waters.

Warning that the nation faces a shortage of vitamin A because of the depletion of the chief U. S. source of this vitamin—soup-fin shark livers—has prompted urgent pleas for federal exploration to uncover new species with even greater potency livers.

Findings Decrease—All figures show U. S. consumption of vitamin A exceeds production.

Scientists of the Fish & Wildlife Service of the Dept. of Interior say that findings of soup-fins in February, 1944, were 70% below those of February, 1943, although fishermen had increased their efforts. At the same time stocks of vitamin A held by producers and pharmaceutical houses at the end of January were 37 trillion units below those at the end of February, 1943.

Best Source—Oil pressed from the exceptionally large livers of soup-fin sharks contains the highest known natural concentration of vitamin A of any taken in the U. S. fisheries.

Other shark livers are also of some importance to processors, but the vitamin A concentration in them is small. **Habitat Limited**—Because of its value as a source of vitamin A, soup-fin sharks have been intensively sought by Florida fishermen as well as by shark fishermen on the West Coast.

Like most other sharks, the soup-fin shark is living young, and the rate of increase is much lower than in the case of true fishes. Moreover the soup-fin lives over the continental shelf off the West Coast, is much deeper than the shelf on the eastern side of the continent. There is, therefore, a definite limit to the area in which soup-fin can live.

Seek New Species—Shark experts say that exploratory operations, particularly in deeper water and with more gear than is now used by Florida fishermen, might uncover new species with even greater vitamin A potency than the soup-fin.

In addition, these experts would like to have the government make a scientific check to determine whether the California jew fish has a liver as potent a source of vitamin A as do jew fish caught off the California coast.

Liver Potency Varies—Scientists say that little is known as to why there is such a wide variation in the

A FLIP OF THE SWITCH

Automatically Re-sharpens the Brushes!



Presto! Change! Flip the switch of this *Finnell 84-XR Dry Scrubber* and the motion of the brushes is reversed. In that way, they are re-sharpened automatically; the need for changing the brushes to maintain a good cutting edge at all times is eliminated. This is but one of the many labor-saving features that make it possible for the *Finnell 84-XR* to clean grease-caked floors in *one-tenth the man-hour time* required when hand-spudding. Stubborn accumulations of dirt, oil, grease, and shavings—on wood, wood block, and cement floors—yield quickly and thoroughly to the two powerful scarifying brushes of this heavy duty scrubber.

Its war-time economy is *fourfold*. The *Finnell 84-XR* saves man-hours . . . aids worker health and safety . . . reduces fire hazards . . . promotes faster trucking. A slight adjustment of the machine adapts it to wet scrubbing, steel-wooling, waxing, or polishing.

For free floor survey, consultation, or literature, phone or write nearest *Finnell* branch or *Finnell System, Inc.*, 3805 East St., Elkhart, Ind. Canadian Office: Ottawa, Ont.

Let's Keep On Backing the Attack—With War Bonds

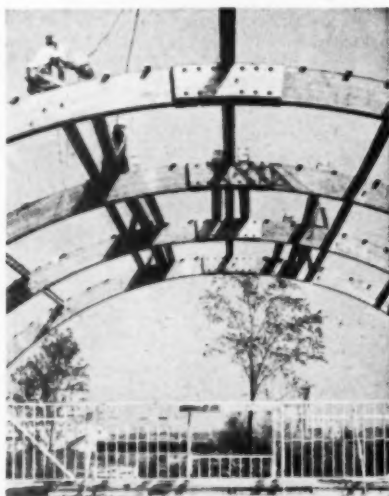
FINNELL SYSTEM, INC.

Pioneers and Specialists in
FLOOR-MAINTENANCE EQUIPMENT AND SUPPLIES

BRANCHES
IN ALL
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DESIGN IS IMPORTANT

...build with
Timber Structures



Glued Laminated Timber Arches, 77' span, for U. S. Naval Training swimming pool.

★ ★ ★

The versatility of wood as a construction material still amazes many who have not followed this product through the war years.

It has been our privilege at Timber Structures to assist in the modernization of wood. Among other things, this has involved design. From our plants have come such divergent and practical designs as glued laminated arches for trusses, beams, columns, designs; for products as small as oars, as large as navy blimp hangars.

Have you plans for future construction work? If so, we should like to talk to you about the economy, availability, strength and permanence of timber as a building material. We are prepared to serve you in timber and allied structural materials. Write for booklet on Timber Structures work.

Engineering in Wood

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potency of Florida shark livers, because no exploratory work ever has been conducted along these lines in semitropical water. A hammer-head shark caught off Florida last winter had a liver carrying 325,000 units of Vitamin A per gram, while another hammer-head produced oil containing only 126,000 units per gram.

Whether the potency of jew fish livers varies between the East and West Coast varieties as do those of sharks is something fishermen would like to know.

Disadvantage of using jew fish livers as a source of vitamin A is that the livers are small in comparison with those of sharks.

Postwar Prefabs

At the end of its tether for the present, the industry faces a gigantic task in the reconstruction period abroad.

The prefabricated housing industry has been pushed into a tight corner by waning government orders, but its morale is sustained by visions of a vast new peacetime market.

Speculation is on the possible export of factory-made American houses to take the place of homes destroyed in Europe's war-battered cities. The dream received its first boost toward reality on Mar. 26 when Prime Minister Winston Churchill spotlighted the prefab house as the means for relieving Britain's housing shortage as soon as the war ends.

• **A Temporary Measure**—Britain has never liked wooden houses, probably will not change now. Since he is highly sensitive to national prejudices, Churchill made it clear that he only advocated prefabs as a temporary measure, to be employed until Englishmen could rebuild on acceptable lines.

He pointed out that a million British homes had been destroyed or damaged. Noting that prefabrication was the quickest way to supply the need he said: "I hope we may make up to half a million of these [prefab homes], and for this purpose not only plans but actual preparations are being made during the war on a nationwide scale." The program would be paid for by the government, which would rent the houses.

• **A Monopoly**—Since the United States would be the only country able to supply such homes immediately after the war, prefab companies realize that the Churchill project is aimed directly at them. But they are staggered by the immensity of the prospective order.

Only 14,500 units were produced by

factory prefabricators between July 1940, and Jan. 1, 1942. It is estimated that the capacity of the entire American prefab industry is not more than 300 homes a year. To meet the British need would require more than 16 years at that rate. And that would rule out sales to the domestic market and other foreign countries.

• **Others Plan, Too**—While British plans are furthest advanced, other nations are known to be considering the same problem. The Dutch are organizing a group to investigate American prefab methods. The Canadians plan to spend \$180,000,000 a year on building for ten years after the war. All countries that have suffered war damage must tackle the matter sooner or later.

Churchill's pronouncement came after the return to England of a special commission which toured the U. S. to examine our mass-produced homes. It was headed by Alfred C. Bossons, a member of Parliament and a fellow of the Royal Institute of British Architects. This commission looked into the systems of prefabrication used in this country, but they were most favorably impressed by the methods developed by the Tennessee Valley Authority for setting up houses that cost from \$1,800 to \$3,000 a unit.

The commission's report to the Ministry of Works singled out the TVA as commendation. ("We would draw your attention to the stressed skin plywood houses we saw being manufactured by the TVA. Though designed for a life of a few years only, we were informed that these houses with reasonable at-



War-time restrictions on materials limit TVA prefabricated houses to coal and oil circulating heaters in the living rooms. Engineers would prefer electricity or warm-air duct systems.

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Attracting Britain's housing planners is the flat-roofed prefabricated home (above left) developed by Tennessee Valley Authority. Assembled in room-size sections (above



right), this unit is fitted together at the site to produce a trim spacious interior (below left)—with standard appliances and furnishings already installed (below right).



tion would remain in good condition for as long as ten years.")

• **Complete Sections**—The TVA system employs complete sections of houses rather than flat panels joined together at the site (BW—Aug. 16 '41, p. 42). In the smaller unit the sections are 8x24 ft., are lifted on and off truck trailers by cranes, are trucked for hundreds of miles from the factory to the final foundations. Plumbing and lighting equipment are put in at the manufacturing plant, as are basic furnishings such as ranges, heaters, tables, chairs, beds, light bulbs, even curtains.

At one project, installation of the furniture in one group of houses was forbidden by the Army officer in charge. These are the only houses that have been difficult to rent. Prefab producers say this proves their point that maximum space utilization demands built-in furniture, that the standard household furnishings are ill-adapted to modern dwellings. Renters themselves realize this.

The TVA house has changed considerably in two years. One trend has been

toward larger homes; early designs had one bedroom; new designs have two and three bedrooms, kitchen, bath, and living-dining room.

• **Production Line**—As a rapid means for building homes for workers at dam construction sites, TVA established its own production line. Now the houses are built for TVA by outside companies. These include the E. L. Bruce Co., Memphis; Schult Corp., Elkhart, Ind.; Gunnison Housing Corp., New Albany, Ind.; Alma Trailers, Alma, Mich.; Prefabrication Engineering Co., Portland, Ore.; National Homes Corp., Lafayette, Ind.

Some of the contracts run into the hundreds of units, and in some cases the sections have been trucked 600 miles from the factory to the building site. One great advantage claimed for the TVA prefabs is that they can be 90% built in an area where there is a sufficiency of housing and workers, then trucked to the point where housing is badly needed and set up in a few hours.

• **TVA Plans Available**—The houses built for TVA are under close inspec-

tion. But the TVA will furnish its plans and advice to anyone who wants to go into the business. It asks no royalties and provides no supervision for houses built and sold commercially. Prices vary, but approximate figures (f.o.b. factory) are: one-bedroom house, \$1,800; two-bedroom house, \$2,500; three-bedroom house, \$3,000. This includes cost of the basic furnishings and equipment. Many producers think post-war prices can be lowered with mass production and with lumber cut to the precise dimensions needed in the building.

Before the war the Bruce Co. specialized in hardwoods, claimed to be the world's largest producer of hardwood flooring. It has made some 2,500 houses for the government so far and is still working full time for government account.

This and other companies making the TVA models are looking beyond their war orders to the possibility of booking contracts from the British. They are wondering whether the boosts given the TVA system by the British commission



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for Transition from war to peacetime production. At FIDELITY you get more than a notable designing and engineering staff. With it you get an unusual manufacturing organization and equipment, with testing facilities well beyond the ordinary.

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the Home Stretch

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will encourage rival manufacturers to shift to this design.

• **Shipping Problem**—Deliveries to the British naturally could not be made in complete sections as is done in this country. But it would be simple to make the panels, pack them flat for shipping, then assemble the sections at British plants for transport to the final site.

Manufacturers in this country have encountered some difficulty with state laws whose limits on trailer-truck dimensions interfered with delivery of the houses. Even greater difficulty might be found in the narrower roads of England.

• **Small Projects**—The prefabricators don't see much government business after the present contracts. It is too late to start extensive war projects, and critical labor areas will just have to get along with what housing they have. There are some small federal projects in the wind. One involves simple shelter huts that may be furnished the foreign staffs of the United Nations Relief & Rehabilitation Administration. Another suggestion is houses for Navy men who come home on leave and have no place to go with their families. But from here on planning will focus on peacetime markets with special efforts to obtain release of enough material to get set for the changeover.

Hemp Won't Move

WFA's subsidy produced lots of straw, but competition of cheaper fibers is too stiff. New planting program slashed.

While Corn Belt senators try to perpetuate a subsidized hemp industry in competition with imported fibers, the War Food Administration is wondering what it will do ultimately with the 100,000,000 lb. of hemp it is expecting to process from last year's emergency crop.

• **Few Sales of Fiber**—The hemp straw—370,000 tons—to be made into fiber is stacked up at 22 government hemp mills, which are in various stages of construction in the Midwest (B&W—Jan. 22 '44, p. 29). Twelve of the mills are in operation, but only a little of the line and tow fiber they have produced has been sold so far.

WFA expected that other government agencies would buy the war hemp cordage at the high prices implicit in the subsidy paid to hemp growers. But this was before lower-priced hempenneque, sisal, jute, and abaca from government-subsidized plantations in Central



LOOKING AHEAD

Studying the aircraft industry's proposals for a national postwar air policy are six of the major company presidents (left to right): Donald Douglas, Douglas Aircraft; T. Claude Ryan, Ryan Aeronautical; Glenn L. Martin, Martin Aircraft; J. H. Kindelberger,

North American Aviation; Harry Woodhead, Consolidated Vultee Aircraft; and Philip G. Johnson, Boeing Aircraft. The four-point plan adopted by them and nine other industry leaders at Los Angeles last week is designed to maintain American military superiority in the air, to insure survival of its plane-building capacity.

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UNTIL BECOMES BROADWAY...

...We Want War Business

Lyon has already helped over 3,000 contractors speed war production of aluminum and sheet steel parts. Aircraft, ships, guns, mobile units and tanks are going into battle with many Lyon-made parts or sub-assemblies.

We have open production capacity for fast handling of more of these war jobs. Our manufacturing plants are well organized as a result of more than 43 years' experience in sheet metal fabrication. Facilities include modern equipment for perforating, blanking, forming, assembling, drawing, annealing, enameling and lacquering. Approximately 2,000 experienced factory workers. Complete tool-rooms in all plants.

Write on business letterhead for book "Craftsmen in War Production"... giving detailed information on Lyon's Facilities, Manpower, Finances and Management.

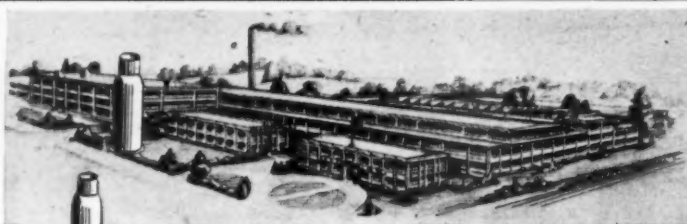
WHAT ABOUT POST-WAR?

Do your post-war products include sheet steel or aluminum? Check Lyon's manufacturing and designing facilities.

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Your plant must have strength of management, foresight and streamlined adaptability to successfully weather the stormy industrial aftermath of war.

★ **The Case of the A. S. Campbell Co., Inc.** ★

The exigencies of war demanded rapid conversion and expansion of the A. S. Campbell Co. plant and its facilities for the manufacture of cartridge cases, primar fuses, initiator caps, smoke emission shells and plating of 50-calibre cartridge cases. Management and industrial planning needed analysis and streamlining and there was all too little time for this vital work. Our experienced and able engineers, brought an expedient solution of the pressing problems and welded the various basic industrial elements into sound constructive operation plans.

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ENGINEERS**



FOR COMFORT AFLOAT

In the early days of the war, life at sea offered little more than mere bounty and meager rations. Now, by seamen's suggestions, there have been some changes. A new type steel locker made by Los Angeles' Weber Shumacher Co. has locker space not only for ample rations but for blankets, cushions, charts, tools, signaling devices, sun and weather lotions, a sail, Bible, prayerbook, checkerboard, songbook and playing cards.

America began to come into the United States in volume.

● **Holding the Bag**—Now it looks as though WFA will be left holding the bag on the subsidy, which yielded the farmers more than \$100 an acre last year.

Meanwhile, to protect the government's investment, WFA controls the price of hemp at a high figure by guaranteeing private mills the same price as the hemp sold by government mills.

● **Acreage Cut Back**—Senatorial interest was aroused when WFA announced that only 60,000 acres would be grown under government contract this year, as contrasted to 180,000 acres in 1945. On some midwestern farms, the hemp brought upwards of \$200 an acre, which farmers don't want to give up.

Officials explain that the project was stimulated by a prospective shortage of war cordage, and that the heavy outlay for mills and machinery is properly a war cost. But apparently they have no desire to perpetuate the subsidy.

● **Stung on Cotton**—Another war casualty is the production of cotton wrap-

for cotton bale coverings. WFA bought 4,000,000 of these wrappers at a cost of \$1.40 to \$1.45 each when it was estimated that the war would cut off the exports of jute and burlap from India. The patterns were offered for sale at \$1.05 each, but only 250,000 or so could be sold because burlap continued to supply at 90¢ to 95¢ a wrapper. Farmers prefer burlap also because cotton commonly is sold on gross weight instead of net weight, and a burlap wrapper is 7 lb. heavier than a cotton wrapper.

WFA is offering to sell half its stock of cotton wrappers at \$1.05 each to anyone who wants to buy them. The remainder will be held in emergency stockpile for cotton bale coverings.

Service Piles Up

Garage men discourage auto repairs now because of labor shortage, thus building backlog of headaches for tomorrow.

Take your car in today to be fixed, and the garage man may tell you the work doesn't have to be done—not at once, anyway. The shortage of mechanics is the reason for this "unsellable."

Tomorrow, as a result, repair places expect to have their greatest volume of business in history, due to the pent-up demand now being created. Factory sources agree, and back up their agreement with other reasons.

More Replacements—While repair work has declined, replacement business has gone up. It's quicker to install a new carburetor than to fix the old one. Orders to replacement parts makers have come close to doubling normal volume. And if there were more mechanics, say experts in the field, today's totals would be doubled.

Despite that situation, cars today need more attention than they are getting. Average age of automobiles in use has increased about two years since output of new vehicles was cut off early in 1942, and the weight of that span of time is reflected in sagging performance.

Bearing on the anticipation of more service work ahead is the fact that more original owners than ever before are driving old cars.

Help Themselves—Secondhand car buyers, as a group, are apt to pick up replacement parts in outlet markets or breakdown junkyards, and to install such parts themselves. Such owners had to care for the bulk of repair work required on a car, because they bought their vehicles just at the point where sub-



... IN THE AIR



... AT SEA

... ON LAND

TEAMWORK DEPENDS ON

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Add to the skill and courage of our fighting men the miracle of electronic communication, and you have the ingredients of perfect teamwork! It's a tribute to Operadio that these great teams depend on Operadio-built communication arteries... linking commanders and crews in planes, in destroyers, in tanks... Consider how this same dependability and electronic skill can "link" your business with post-war markets! What's your problem? Let Operadio engineers help you meet the challenges of Tomorrow... the electronic way! Operadio Manufacturing Company.

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SYMBOL OF ELECTRONIC EXCELLENCE SINCE 1922



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FAMILY IS PROTECTED...
A MAN IS A BETTER EMPLOYEE

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HELPS AN EMPLOYEE TAKE
BETTER, SURER CARE
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...by making adequate insurance
protection available at a cost any
employee can afford.

*The Protected Pay Envelope provides,
singly or in combination, Group Life,
Accident & Sickness insurance, Hospital
Expense benefits, and a Retirement
income for employees.

CONNECTICUT GENERAL
LIFE INSURANCE COMPANY
HARTFORD, CONNECTICUT

stantial overhauling began to be necessary.

Now, however, original owners are still holding cars that have reached that repair-hungry stage. They don't know how to do the fixing, and they want it done. That's one reason for the heavier load on the established repair places now.

• **Putting It Off**—But repair work that should be done today just isn't being done. Only really necessary jobs are being handled. The rest are being put off. This is building up a huge backlog of demand which will not be filled until mechanics leave the Army and the high-pay factory jobs to return to their shop benches.

When that day comes, toward the end of the war, other factors will join to enlarge the repair business.

Royce G. Martin, president of Electric Auto-Lite Co., recently pointed out that regardless of what new car production may be authorized, it will fall far short of filling demands for at least a few years. Meanwhile, driving of old cars necessarily will continue.

• **Bars Will Be Down**—And, Martin observed, driving will be in a period when limitations will all be taken off—gas rationing ended, speed limits raised, travel restrictions eliminated. War workers will want to take vacation trips. Mi-

grant workers will want to go home. The result will be a huge wave of maintenance and a concurrent need for repairs.

General Motors is watching this future. Trade reports have G.M. considering a plan to sell its own factory parts through selected jobbers as well as its dealers.

This program may not be adopted in the face of likely opposition from dealers who feel that authorized parts distribution by outside sources would impair their revenue. But the fact that broadening of distribution is being pondered indicates anticipation of expanded parts and service markets.

• **Wider Service Market**—Service stations also expect a wider market and hope to be ready for it. No moves are being made today to expand facilities because of the help problems, but this likely will be made as soon as possible.

Some keen distributors have gone so far as to urge dealer outlets to hold off expansion now. They see how companies they represent have expanded physical facilities, and feel that these new facilities will be put to postwar civilian goods uses. They want the channels clear to accommodate products of their established factory suppliers; they expect to take on the added business; and they expect to make money out of it.



RECAPPERS' COLLEGE

Employees of 25 tire dealers are learning the fine art of recapping in a novel school operated by the Board of Education at Dallas, Tex. Using molds and machines lent by a manufacturer, the students work in small groups under expert supervision.

There's no tuition, but the employees must provide practice casings and pay for the new rubber used. Two factors behind this new program are: (1) Recaps were not popular in the Southwest before the war; (2) renovated tires are suffering the stigma of faulty materials and workmanship which were prevalent a few years ago.



Psychological warfare... ON WHEELS

★ ★ ★
 Davidson offers to business and industry the most modern and efficient means of producing office forms, letters, confidential reports, stationery, envelopes, advertising literature, etc., at high speed and low cost. Like any other duplicator, the Davidson will reproduce from offset plates, type, electrotypes, and rubber plates, so you may select the method best suited to the job. And only a Davidson can give you *all* this in one machine.

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It tells the complete story of the Davidson... shows how it can give you a new high in quality at a new low in cost. Write today...no obligation.

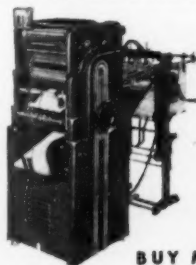
There's nothing backward about these psychological warriors. They operate where things are happening. Bumping along over shell torn roads... following closely each front line advance... they're ready to go into operation at a moment's notice. Each of these mobile units of the OWI is fully equipped with a Davidson Dual Duplicator, plenty of offset plates and supplies, type, type-writer, and reams of paper... everything that's needed to prepare and produce thousands of effective propaganda leaflets based on accurate, last minute news.

Shot from guns or dropped from planes, these leaflets spread the news of our steady advance... give hope to oppressed peoples... and cause thousands of our enemies to lay down their arms in surrender.

The Office of War Information in collaboration with the Army is performing a vital service in this psychological warfare. And not only in these mobile units, but in OWI outposts all over the world, Davidson Dual Duplicators are used for speedy, efficient, dependable production of various types of propaganda literature even under the most trying conditions.

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PRODUCE IT ON A
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BUY MORE WAR BONDS

Wires

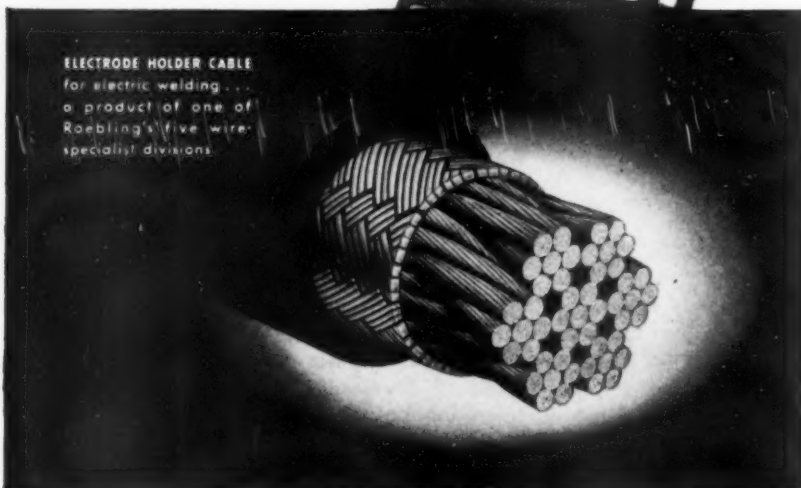
WORKING AS A TEAM

MORE AND MORE, the armed services and industry are finding that you can accomplish most anything with a lot of little wires working as a team. 133 little ones, stranded and laid together, make a steel control cable, smaller than your little finger, that can pull a fighter out of a dive. 8,379 fine copper ones make a heavy electric welding cable so flexible it doesn't tire a ship welder's arm, working all day. Aluminum wires only .010 inch thick, 20 to the inch, make a feather-light screen filter that keeps dust out of bomber engines.

The small size of these wires doesn't make them unimportant. Quite the contrary—it makes them more important than ever. They must be right every step of the way...the steel or other metal of which they are made...the dies that draw them to size...the machines that strand or weave them into cable or screen. That is why America can be proud of facilities like the Roebling mills, where wire-making is a specialized art...ready with the plant facilities and the men and the know-how you want when you say

It's a job for the Pacemaker!

JOHN A. ROEBLING'S SONS COMPANY
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Branches and Warehouses in Principal Cities



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WIRE ROPE AND STRAND • FITTINGS • AERIAL WIRE ROPE SYSTEMS • COLD ROLLED STRIP • HIGH AND LOW CARBON ACID AND BASIC OPEN HEARTH STEELS • ROUND AND SHAPED WIRE • ELECTRICAL WIRES AND CABLES • WIRE CLOTH AND NETTING AIRCORD, SWAGED TERMINALS AND ASSEMBLIES • SUSPENSION BRIDGES AND CABLES



AGRICULTURE

Feed Crisis Near

Nation's farms facing serious shortage of grain for animal feed. Pinch to continue for next three or four months.

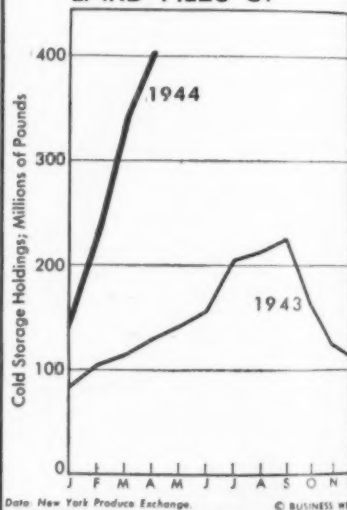
If the corn shortage now harassing industry by slowing the flow of essential war materials (BW—Apr. 29 '44) were an isolated phenomenon, it would be serious enough.

Actually, it is a minor manifestation of a major economic ill. The serious shortage of animal feed, which has long been heralded by prophets inside and outside government, is just about to hit U. S. farms with full force.

● **No. 1 Feed**—To the processors, who use less than 5% of a good year's crop to make human food products and commodities upon which both food and nonfood industries depend, corn is raw material.

But corn's big significance to the nation's economy, and particularly to the farmers who grow the grain and use 90% of it on the farm, is as our No. 1 feed. American livestock gets 80% of its carbohydrate concentrates, and

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substantial share of its protein needs, from corn.

Conflicting Moves—The government has made a few gingerly attempts to discourage needless use of feed since the impending shortage became apparent.

But for every economizing move, there have been in previous months half a dozen prodigal pushes in the opposite direction, generally actuated by the War Food Administration's warm heart for the farmer and the farm bloc. Examples: the orders which last winter at the height of the hog glut extended the official hog price support level, in spurts, from 240-lb. maximum to 300-lb. maximum to frustrate the packers' tendency to buy hogs just above support weights and let the other little piggies go home.

Behind the Shortage—These orders encouraged farmers with bulging cribs to feed their hogs to lardy weights beyond actual needs, instead of selling off surplus corn.

Last week the ceiling price on hogs above 240 lb. was cut back from \$14.75 to \$14, effective May 15, obviously to discourage over-feeding. But the mischief is only half halted as long as the floor on hogs from 240 lb. to 300 lb. remains at \$13.75. Millions of bushels of grain were consumed by hogs which could not be marketed because packing houses were already extended to their killing capacity last December, January, and February. Pork packers were swamped again last week (page 20), and the embargo which followed will make further inroads on farm corn cribs.

The Basic Facts—Elaborate statistical presentations of the cause and progress of feed-inventory depletion clutter federal offices. But the basic statistical facts are simple.

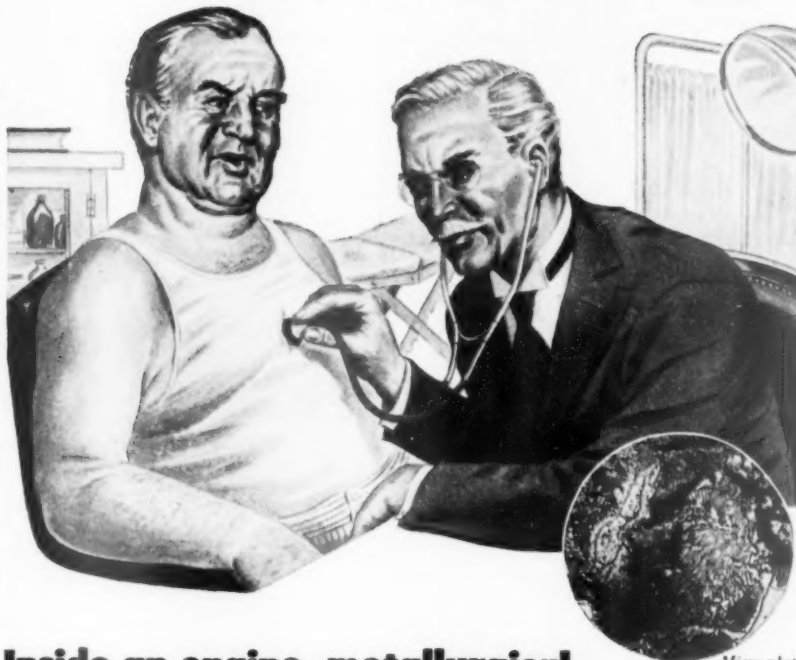
During the prewar period of big crop surpluses and the so-called ever-normal granary, this country built up a carry-over inventory of feed grains roughly approximating a normal year's feed needs.

For almost three years, now, we have been feeding this grain and our concurrent crops into the greatly increased livestock population at an accelerating rate which averages about one and one-third crops a year. On Jan. 1, 1944, there were about 900,000,000 bu. less of all grain on hand in the U. S. than a year earlier.

At Bottom of Bin—We are, therefore, getting close to the bottom of the bin. The time is near when we shall have to bring our feed budget into balance.

There remains more wheat in Canada than we have transportation capacity to move. But also, WFA is thinking in terms of not drawing Canada's wheat stocks much lower for feed wheat, lest in some even more serious emergency

It's what goes on INSIDE that counts



Micro-photo of Pedrick C-20 metal enlarged 500 times.

Inside an engine, metallurgical history is being written in piston rings

FOR some time now, the Pedrick piston rings we supply for United Nations aircraft engines have been made out of our new C-20 metal. No piston rings must meet a tougher test, for these engines power the world's fastest planes. Pedrick rings made of C-20 metal have more than twice the tensile strength of rings made of usual castings . . . and they are being used both with, and without, PORUS-KROME plating.

This is an example of the practical developments which war-production has created to assure even better piston ring performance in post-war truck, bus, car, and tractor engines, as well as in Diesel engines, compressors, pumps, and hydraulic equipment. Always insist on Pedrick *precisioneered* piston rings for top efficiency. WILKENING MANUFACTURING CO., Philadelphia 42, Pa. In Canada: Wilkening Manufacturing Co. (Canada) Ltd., Toronto.

Pedrick

precisioneered PISTON RINGS

MAINE

YOU OUGHT TO KNOW INDUSTRIAL MAINE

In thinking of your new business or branch plant, don't overlook these many advantages of a location in the State of Maine.

ABUNDANT POWER There's dependable, nominal cost power available everywhere in Maine, in whatever loads your particular operations may require.

STATE TAXES CONSIDERATE OF BUSINESS Maine's corporate laws and tax structure are intended to promote our industrial development. The State government is operated from current revenue.

VAST NATURAL RESOURCES Maine produces many raw materials. Here lies the greatest forest area East of the Mississippi, providing a vast supply reservoir for wood manufactures, pulp, paper and by-products. Our supply of cellulose is inexhaustible.

PURE, SOFT PROCESSING WATER The waters of our 2500 lakes and 5000 rivers and streams possess a high degree of purity and softness. This is of incalculable benefit in operations requiring an adequate supply of pure processing water.

MARKET NEARNESS Overnight from anywhere in Maine, manufacturers of consumer goods will find the richest market in the world, purchasing nearly one third of the finished goods sold in the country.

GOOD TRANSPORTATION FACILITIES Maine has an excellent transportation system by air, train, truck and water. Maine is on the Great Circle route to Europe, is closer by water to major South American ports than Southern Seaboard and Gulf ports.

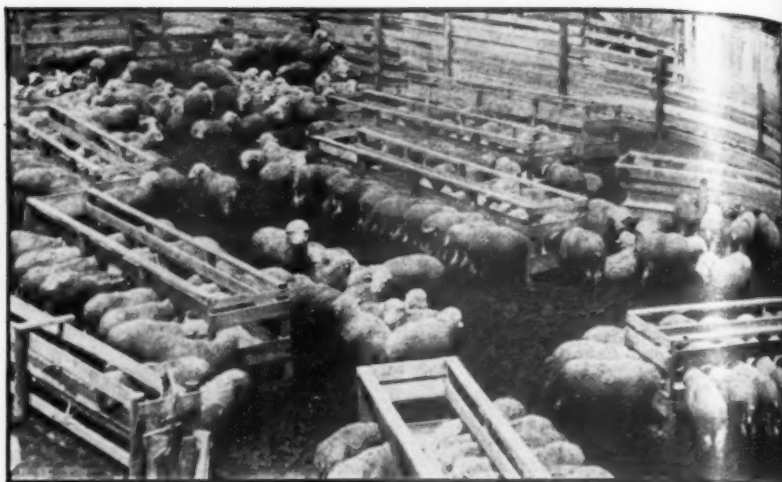
RESPONSIBLE WORKMEN Your workmen in Maine are natively ingenious and resourceful—already skilled at many crafts and easily trained to new trades. Fairness in their relations to employers and responsibility to their jobs are natural traits.

AND MAINE IS A GOOD PLACE TO LIVE Don't overlook the personal factor—your own horizon for living in this the Nation's vacationland. Our climate is the most healthy in the country. No sweltering summers to slow down shop output nor your own energies. In this land of homes, families are reared in a background of social, educational, and religious culture.

"Maine-made" itself is a stamp of goodness—accepted the country over as a mark of craftsmanship and honest worth. The State strives constantly to aid its industries—opening new markets, new distribution avenues, and developing new products for them.

This book describes fully the many advantages of locating a business home here in friendly Maine. We'll be glad to send you a copy upon request.

MAINE DEVELOPMENT COMMISSION
INDUSTRY SERVICE
STATE HOUSE, AUGUSTA, MAINE



LITTLE LAMZY DIVEY?

Feed problems of dairymen, hog raisers, and cattle feeders have hit the headlines, but how about the 35,000 lambs held by Patterson & Hill at Morris, Kan.? They haven't tasted corn for days, won't in the near future unless the owners go into the black

market, and meanwhile subsist on hay, linseed meal, and Kansas wheat. War Food Administration restrictions on the sale of corn—designed to force the grain to millers whose production of items needed by war plants is sharply curtailed—have caused Patterson & Hill to carry their pleas to the halls of Congress.

we find ourselves and our Allies lacking a contingency reserve of wheat for food.

• **More Livestock**—The U. S. totals of grain-consuming animal units (including poultry) on farms Jan. 1 for four successive years tell the over-all story:

Year	Thousand units
1941	133,449
1942	143,077
1943	159,599
1944	170,836

Similar comparative tabulations of grain-consuming animal units in states which always have to import feed from beyond their borders, and of states which are traditionally producers of surplus feed for cash sale, are likewise illuminating.

The three Pacific Coast states in the tabulation below are deficit states, and the four trans-Mississippi states are normally surplus states.

State	Thousand Animal Units— 1941	1942	1943	4-Yr. Increase %
Washington ...	1,317	1,503	1,561	18
Oregon	1,264	1,407	1,434	13
California	3,380	3,714	3,773	12
Iowa	13,646	17,635	19,286	41
Kansas	4,303	5,993	6,203	67
Missouri	6,970	8,623	9,208	32
Nebraska	4,655	6,729	7,583	63

• **Deficit Areas**—The significance of these increases is clear—and for the states which are always dependent upon shipped-in grain, depressing. California will have to ship in 46% of its feed this year. Feed grains on California farms Jan. 1, 1944, were 194,000 tons, as against 235,000 tons a year earlier.

Feed grain in the deficit areas of the Far West, Northeast, and South is generally between 10% and 20% below a year ago. The Northeast is in best position because it has first access to Canadian grain imports.

• **Grain Needed at Home**—Facing substantial increases in their own requirements, the deficit states must also face the undeniable fact that the states which normally produce feed surpluses have so increased their animal units that they will have less grain—or even no grain—left over to ship.

The war has brought other increased needs for grain, including the alcohol program and wet corn milling, which accentuate the feed shortage. Soybean products have been promoted for human consumption, thus robbing Peter to pay Paul. Every feed grain and oilseed have felt these same influences.

• **Supply Outlook**—Walter Berger, Des Moines feed manufacturer turned WFA feed chief, has long been urging realistic management of our dwindling feed supplies. He points out that disappearance of all feed grains during the 1943 crop year up to Jan. 1, 1944, was about 8% greater than the preceding year: 57,000,000 tons as compared with 53,000,000 tons.

Total supplies of feed concentrates in 1943-44 are estimated at 169,000,000 tons, 3,000,000 tons less than a year earlier. The supply of feed concentrates per grain-consuming animal unit this

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and many others.

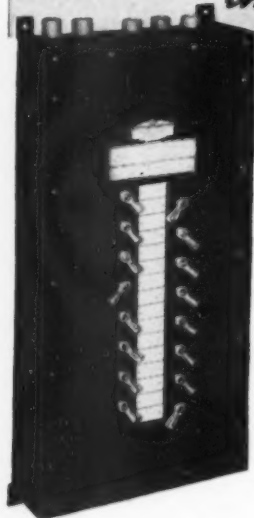


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season has been slightly greater than the average for the past ten years (which include some years of drought and depression) but about 11% less than in 1942-43. Estimated production of the four principal feed grains in 1943 was 115,000,000 tons, against 123,000,000 tons in 1942.

• **Lower Feed Stocks**—For livestock feed, estimated available supply as of Apr. 1, 1944, including prospective imports, was 2,200,000,000 bu. compared with 3,100,000,000 bu. a year earlier.

Argentine corn and barley trickle irregularly into our ports, as bottoms are obtainable. Houston received a shipload of barley last week, and more is on the way.

• **Mixed Feeds Tight**—Supplies of commercial mixed feeds are running along at about the same rate as last year, but these are not enough to meet demand comfortably.

Protein supplies, augmented by the 1943 bumper crop of soybeans and other oilseeds, and frugally stretched by the feed industry's voluntary conservation program, are causing less worry than a year ago.

High-protein feed for 1943-44 is estimated at 11,400,000 tons compared with 11,200,000 tons in 1942-43, but this provides less protein per animal unit. WFA's 20% set-aside requirement from crushers provides enough high-protein meal to meet most of the emergency deficit situations which spring up from maldistribution and, to this extent, gives greater flexibility than existed last year.

• **Washington's Remedy**—Washington is urging farmers to reduce their flocks and herds in orderly fashion, lest failure to do so should bring a subsequent need for indiscriminate slaughter in an emergency shortage.

The authorities want more beef killed, at least 35,000,000 to 36,000,000 head in 1944 as compared with 27,300,000 in 1943, to meet civilian, lend-lease, and military needs.

Hogs are a relatively bright spot because they are being killed rapidly, as witness the current reductions in ration-point requirements for pork products: the hog population now stands 16% under last year.

• **Wheat for Feed**—Feed wheat available in the crop year which began Oct. 1, 1943, was estimated 375,000,000 bu., against 470,000,000 bu. the previous year, and it has been going fast.

We shall be pretty well out of feed wheat in the next three or four months. WFA plans to dole it out sparingly, giving out about 30,000,000 bu. to 35,000,000 bu. in May and June, then cutting back hard in July and August.

• **Weather Hits Oats**—The wet spring in the grain states has set back the out

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1943 was
5,000,000

crease by an as yet unmeasured total
beneath estimated plantings. This is a
serious blow because the incoming crop
of oats early in the summer was being
counted upon to supplement existing
feed stocks.

However, if farmers as expected shift
this unplanted oat acreage into corn and
soybeans, the total tonnage of feed for
next year should be substantially in-
creased by the heavier yields of these
later crops.

One of the top feed men in Washing-
ton summed up prospects this week: "It
is going to be tough for the next four
months. Some local areas are going to
have an awful time, and the papers
will even carry some true stories of
entire poultry flocks being killed off for
lack of feed. But we'll weather through,
and by fall we should have our feed and
livestock equation in balance once
more."

More Subsidies?

Success with dairy feed
program may lead WFA to try
out production cost payments in
egg and cattle markets.

Flushed with the success of its dairy
feed payments to induce farmers to in-
crease production of milk, the War
Food Administration is discussing ways
of extending production cost subsidies
to other farm products.

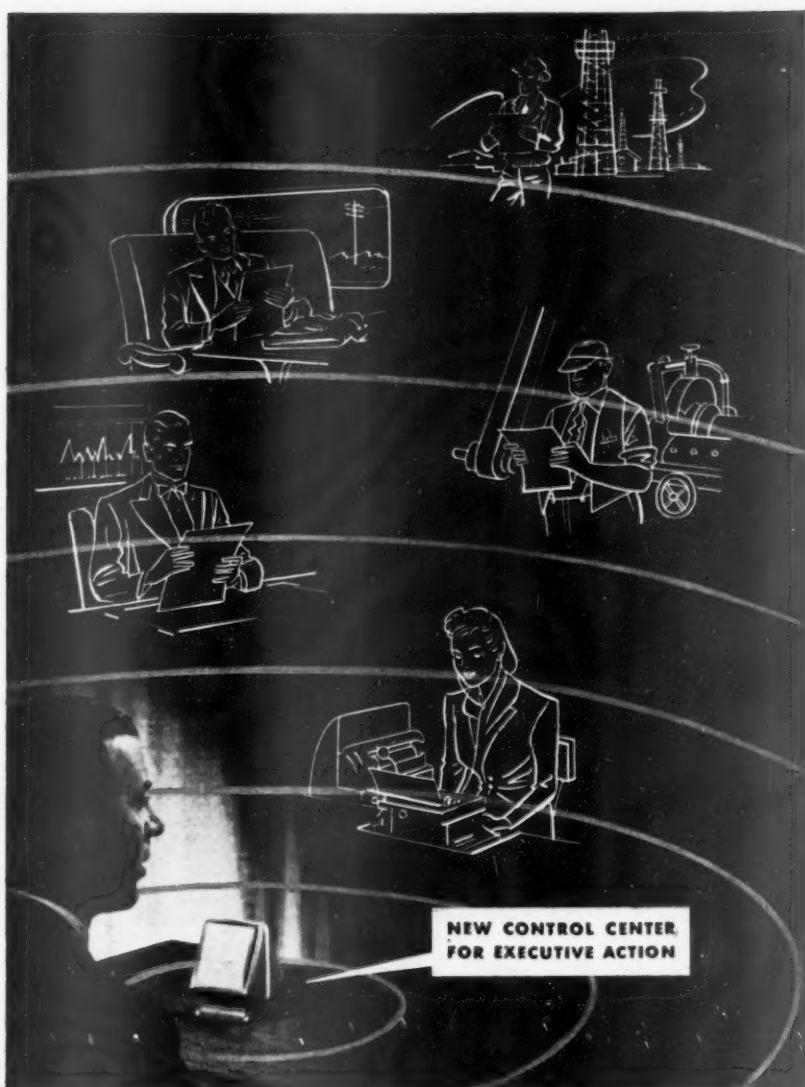
• **Two Projects**—Tabbed for early con-
sideration are a feed subsidy payment
to maintain production of eggs next
fall and winter, and a payment to cat-
tlemen to induce larger marketings and
thus to increase the fall and winter sup-
ply of beef.

Begun as an experiment last winter,
the dairy feed payments have kept pro-
duction of milk at 1943 levels. An in-
crease above these levels is now sought
by the promise of a further hike of 12%
to 25% in the payments next Septem-
ber through March, 1945.

• **To Cut Subsidy**—The present dairy
feed subsidy of 50¢ to 80¢ a cwt. of
milk and 8¢ a lb. of butterfat will be
reduced to a range of 35¢ to 65¢ for
milk and to 6¢ for butterfat during May,
June, July, and August. The ante then
will range 60¢ to 90¢ for milk and to
10¢ for butterfat through next March.

Meanwhile, southern governors who
are complaining over the summer re-
duction in subsidy payments have been
told bluntly that the WFA doesn't pro-
pose to pay for feed while cows are eat-
ing grass.

• **Production Rose**—Dairy feed pay-
ments were initiated last winter when



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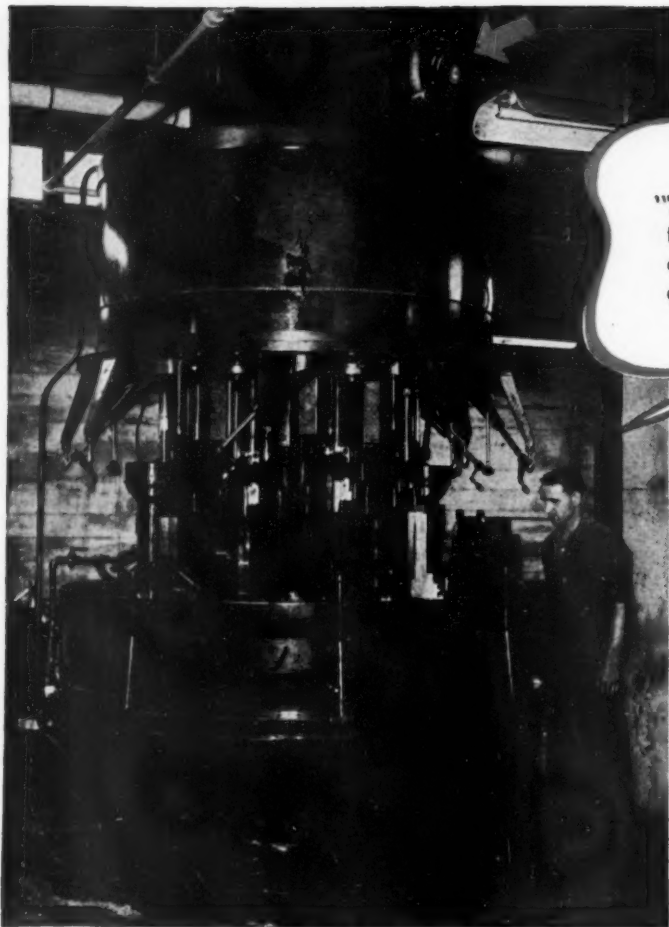
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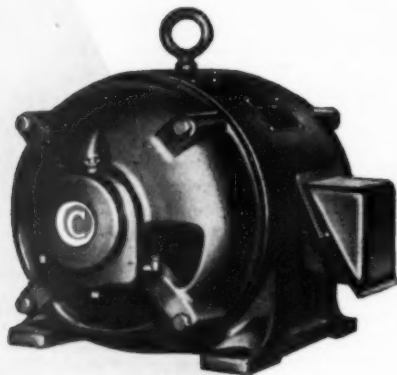


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On applications such as that shown in the photograph above, accuracy of output is paramount. One of the reasons that Century squirrel cage motors are so often selected for this type of job is that their unusual freedom from vibration contributes to the accuracy of the driven machine.

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milk-feed price ratio dropped to war levels and milk production went into a decline. The decline was stopped, the subsidy was increased, and production rose to the 1943 volume.

The Bureau of Agricultural Economics is now forecasting a 1944 farm milk flow of 118,000,000,000 lb. as compared with presubsidy expectations of more than 115,000,000,000 lb., and with 118,000,000,000 lb. produced last year.

Would Boost Ratio—Eggs recently have been in the same price-depressed situation that milk was last fall. The egg-feed price ratio has dropped below war levels, and producers have been buying fewer baby chicks for flock replacements and layers next fall. To stem this decline, the WFA would boost the price ratio by paying feed subsidies to producers.

A Different Case—The cattle situation is somewhat different in that a reduction instead of an increase in production is being sought. The idea is to pay the cattlemen a bonus above current market prices, the pressure on limited supplies of feed and storage would be reduced and the meat supply correspondingly increased.

Some officials believe that direct production payments to farmers could be made to resolve the whole controversy over rollback subsidies on meats, butter, and flour. They would keep the prices of these commodities at current levels, but would pay farmers all or part of the rollback subsidies which are now being paid to processors by the Reconstruction Finance Corp.

Rollback Too Far—Farmers—and especially the cattle producers—have complained all along that last summer's price reductions on meat, butter, and flour rolled back on them instead of stopping at the processor level.

The RFC rollback subsidies are at the rate of \$600,000,000 a year.

HATCHING EGGS WILL FLY

People in occupied countries will want poultry during reconstruction, and hatching eggs can be flown to them instead of birds, there will be many economies.

To determine whether eggs will hatch after the variations of temperature and barometric pressure incident to flight, the University of Maryland and American Airlines recently flew 15 dozen eggs from Washington to Los Angeles and back, and then put them into incubation, with an equal number that had not been flown, as a check.

Result—157 chicks hatched from the 80 eggs that flew, and 162 from those used as a check. Conclusion: Hatching eggs can be flown to Europe.

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every time you leave the office...**



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BW 6-6



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A manufacturer of tanks was in need of 1,000 tons of alloy steel within 21 days. A telephone conversation with the Follansbee general offices brought him a favorable answer *within the hour*—and delivery was subsequently made as scheduled. Production schedules cannot always be adjusted to accommodate such orders, of course—but a prompt answer can always be depended upon.

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PRODUCTION

Penicillin Moves

Civilian distribution to be handled from new office in Chicago. WPB order is revised to incorporate limited use.

Headquarters for the distribution of penicillin to civilians moved westward from Boston to Chicago over the week end with the establishment of the Office of Civilian Penicillin Distribution at 226 W. Jackson Blvd.

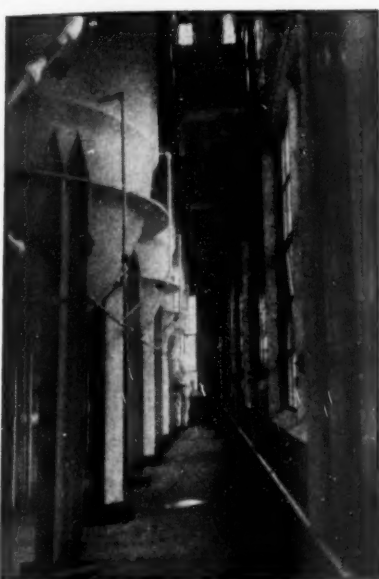
Dr. Chester S. Keefer of Boston, chairman of the National Research Council's Committee on Chemotherapy and consultant to the Office of Scientific Research & Development, who had until now the heart-breaking task of choosing the civilian recipients of the small emergency distributions of the drug made to date, will be stationed in Chicago as medical adviser.

• **To Amend Order**—No changes will be made in the personnel of the Washington office now directing the penicillin production program. However, WPB Order M-338 allocating the mold derivative is being amended to incorporate a new "nationwide system for a limited civilian distribution."

Establishment of the new system will channel penicillin to over 1,000 "depot hospitals" in strategic locations and thence to hospitals and patients all over the country. The plan is ready within only ten months of the inauguration, early last summer, of the \$15,000,000 penicillin program which has brought production up from only 400 million Oxford units in the first six months of 1943 to over 21 billion units during the whole of the same year.

• **Definition of Unit**—One Oxford unit is the amount of penicillin which completely inhibits the growth of a test organism, *staphylococcus aureus*, under certain specified conditions; amount required per case varies from about 100,000 units—weighing about one gram, or 0.035 ounce—to a few million; unit of distribution is a small, aluminum-closed, glass vial containing 100,000 Oxford units in the form of a more or less stable sodium salt of penicillin.

No date has yet been set for distribution under the new setup, but Army and Navy hospitals have been stretching supplies by restricting use of penicillin to men whose wounds and diseases do not respond to sulfa-drug treatments, and it is anticipated that a military backlog will soon have been built up.



Only a short time ago confined to infinitesimal amounts, the manufacture of penicillin has now reached the mass production stage at Commercial Solvent Corp.'s new \$1,750,000 plant in Terre Haute, Ind. First major step is growing the mold in huge fermentation vats (left), each having a capacity of 20,000 gal. Then the precious salts are extracted by centrifuge and vacuum operations, and packaged (above) in tiny vials each holding 100,000 Oxford units (a measure of germicidal potency). At present a staff of 100—mostly research and laboratory specialists—is employed at the plant, which, when in full operation, will produce 40 billion units a year—twice 1943's entire production.

sufficiently to permit allocations to civilians.

• **Quota Basis**—Each month, when the time comes, the 21 American penicillin manufacturers will apply to WPB in Washington for a civilian quota based on the amount of their production, and the list of individual manufacturer's allocations will be forwarded to the OCPD in Chicago, which will assign quotas to depot hospitals.

Each hospital will then order against its quota, sending its order to the Chicago office whose final function will be to assign the hospital order to a penicillin manufacturer; orders will be rotated among manufacturers, because production costs and selling prices now vary from plant to plant. Rotation is designed to give each hospital a fair average price in the course of several

months; shipments to each hospital will be handled by the manufacturer direct.

• **Price Comes Down**—Although the price of penicillin has dropped during the past year from \$20 for 100,000 units to an average of around \$3.25, production experts are quick to point out that as long as the drug must be extracted from the mold, penicillium notatum, the price must remain relatively high; formulas for fermentation mediums used in growing the mold vary from plant to plant, but the penicillin yield ranges from only 0.005% to 0.1%, and about half of that is lost during the process of recovery which involves a variety of intricate production steps (BW-Nov. 6 '43, p66) and the use of about 50 different chemicals in preparation of mediums, recovery, and testing.

Until the precise chemical structure



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Another feature is the roller type load chain that does not stiffen, stretch nor bind. It assures smooth, less-effort lifting.

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of penicillin can be determined and the material synthesized like so much thiamin (vitamin B₁) or ascorbic acid (vitamin C), the manufacturers will have to rely on one or more of four tedious methods of mold cultivation: (1) the trickle process of letting inoculated broth flow over stones or wood chips and letting the mold develop on them; (2) the bran process of inoculating sterile bran with mold spores and withdrawing penicillin after a long incubation period; (3) the surface, or bottle, method which grows the mold on "quescent media" in containers lying on their sides (BW-Jul.3'43,p28); (4) the submerged, or deep fermentation, method which grows the mold in huge vats two stories tall.

● **Production Problems**—Since the bottle method was considered the quickest to get into production, most of the 15 or more plants now in production are using it; yields are good but growing cycles are long, thousands of bottles must be handled each day, and labor costs are high. Unless some improvements are made in the process, bottle plants will not be able to operate as economically as deep fermentation plants now coming into production, hence are thought by some experts to stand in a poor competitive position for the long pull.

However, cost and price comparisons will have to wait until July of this year when it is hoped that all 21 penicillin plants (and two Canadian plants) in the official program will be in production; ultimate comparisons will have to await the structural determination and synthesis of the drug whose list of uses in combating various diseases—which include gas gangrene, gonorrhea, syphilis, streptococcal and staphylococcal infections—has now filled six single-spaced typewritten pages (BW-Sep.18 '43,p62).

● **New Discovery**—Meanwhile in England, where penicillin was discovered, scientists are experimenting with a still newer discovery, vivcillin, which is reported to be related to penicillin but capable of production in "large quantities at comparatively low cost"; it has been used with encouraging success at Wellhouse Hospital, Barnet, London, in the treatment of hemophilia, septicemia, peritonitis, mastoiditis, septic wounds, and infected burns.

Dr. John N. McDonnell, who has been chief of the Research & Statistics Unit of the Chemical Bureau's Drugs & Cosmetics Section, will be director of the new Chicago office of OCPD. Roy S. Koch, chief of the Biological & Parenteral Solution Unit of the Drugs & Cosmetics Section, will continue to administer WPB Order M-338 from the Washington office.



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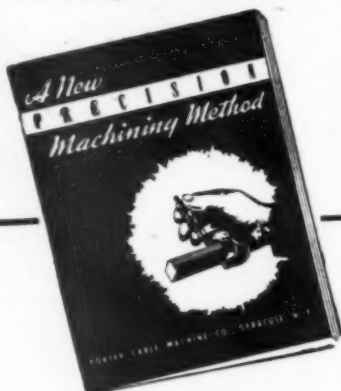
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Quiz on Tools

General Motors' seminar answers ten questions regarding machine tool maintenance. New design problems are discussed.

Machine tool builders got the answers to the "ten questions most frequently asked" by them when General Motors invited a group of tool company executives last week to sit in on a "seminar on machine tool maintenance problems and how to overcome them":

(1) Should machine tool makers standardize more? Yes, particularly on the machine elements—electric controls, pushbuttons, sizes of fasteners. Model designations might well show capacities of machines, instead of being arbitrary numbers or letters.

(2) Should feeds and speeds be increased? Definitely yes.

(3) Are hydraulic or mechanical feeds preferred? General Motors is edging away from hydraulic feeds as too many are so installed as to make maintenance difficult.

(4) Should full electric controls be used? Yes, if durable and accessible.

(5) Is the war emergency finish satisfactory? No, it's too hard to keep clean. Some divisions want two-color jobs, with work areas lighter, for safety.

(6) Should the machines be made to produce better finishes and more accurate work? At the very least, they should be made more rugged, to equal previous performance at the faster machining rates now found practical.

(7) Should chip disposal be improved? By all means—it is bad now, and it will be worse when speeds and feeds gain.

(8) Are there sufficient lubrication facilities? Machine tool builders have done a good job in this respect; the aim should be to provide automatic lubrication for every bearing in a machine.

(9) Are ground and hardened ways wanted? Yes, but they should be made replaceable, so they can be removed and reground on a surface grinder.

(10) Are electronic controls wanted? Yes, but the problem is tough. Specially trained maintenance personnel is necessary.

• **Reason for Cheer**—General Motors also told the machine tool executives that G.M. alone would require 10,000 or so new machine tools for reconversion—far beyond prewar year-to-year requirements.

And they were told that in the next 90 days many orders for these machines would be placed, even though production on them could not begin yet.

PLAN MIDGET AIRPORT

Probably the nation's smallest airport has been licensed in Michigan, the forerunner of many others.

In these days of two-mile runways,

this new port for flying shows measuring only 200x300 ft. in size. It has been given license No. 1 by the Michigan Board of Aeronautics for helicopter landing and takeoff.

The property, located within Detroit's city limits, is owned by Aeronautical Products Co., designer of a helicopter which has undergone several test flights.

Tests Conflict

Detroit officials try to reconcile results of gasoline additive tests with report of Bureau of Standards.

Detroit city officials are trying to reconcile the findings of their tests on a gasoline additive, Powerin (BW—Apr. 8'44,p69), with contrary reports from Washington.

• **Ordered Big Supply**—Public Works Commissioner William M. Walker, Jr. made a series of tests with Powerin during the past two years, and found city car mileage increased 14% to 25%. He decided to order a year's supply for city cars.

The Detroit purchasing department, however, sent samples to the National Bureau of Standards of the U. S. Dept. of Commerce before approving requisitions. The word came back that one part in 400 parts of gasoline, the recommended mixture, had provided "no improvement either in maximum power output or economy."

• **Value As Carbon Remover**—This, however, did not daunt the Detroit agents for the fluid. They have maintained all along, they said, that the compound is not a "gasoline stretcher." The value of the additive, they said, is in lubricating valves and pistons, and removing carbon and gum.

Burning rates of gasolines are also increased, they stated, as though Ethyl fluid were added. Thus, they maintained, addition of their product has the beneficial effect of a visit to the garage to have engine carbon removed and valves ground and freed up.

• **More "Dopes" Used**—Meanwhile, a National Automobile Dealers Assn. bulletin said that the use of gasoline "dopes" appeared to be on the increase through the country, though government tests have "thus far failed to establish any evidence of their beneficial qualities."

The N.A.D.A. reported that check of the National Bureau of Standards showed that hundreds of "dopes" had been investigated, without uncovering one which increased mileage.

NEW PRODUCTS

Glass-Asbestos Textiles

Natural asbestos fibers and man-made glass fibers, both fire-resistant, combine to form new Glass-Asbestos Textiles which are already doing important war-time jobs. Woven into inorganic canvas or duck, they become boots for guns and airplane tail wheels, or even protect the retractable landing gears of Thunderbolts from the hot exhausts of their superchargers. Braided into inorganic cord, they become shroud lines on military parachute flares.

Two methods are used by the Owens-Corning Fiberglas Corp., Toledo, in making the textiles: (1) spinning the two fibers together to make yarns for subsequent weaving or braiding; (2) spinning the fibers separately and using the glass yarn for fabric warp and the asbestos for weft, or filling. The glass provides tensile strength, the asbestos, abrasion-resistance. Combined they are said to provide "light weight, high abrasion-resistance, and resistance to high temperatures and fumes," which will make them available after the war for filter cloths, dust-collecting bags, fireproof screens, and other industrial applications.

Mechanical Drafter

Patents are pending on the new Sun-Vu Projection Drawing Machine, developed by the Air-Vu Co., 1742 Arapahoe St., Denver 2, Colo., which is already beginning to achieve new speed

and accuracy records in at least two fields: (1) phantom and exploded views from two-dimensional engineering and architectural drawings for catalogs, training manuals, etc.; (2) scalable projection drawings rendered directly from mechanical parts and assemblies, as illustrated below.

Resultant "axanometric" drawings look as if they "were being viewed from infinity" because of the "absence of the distorted appearance usually present in perspective or isometric type drawings." Operation is simple, consisting of following the outlines of a given part or drawing through an optical viewer and transferring significant reference points to drafting paper by pressing a button which energizes a solenoid marker. Points are then connected with straight or curved lines by means of special triangles, dividers, and French curves. Drawings are said to be so accurate that they can be "sealed in at least five directions—charts having been developed to determine the length of all foreshortened lines."

Insulating Window

Freedom from condensation and frosting during the winter, conservation of heating fuel, insulation against heat, cold, and street noises all the year around are promised to dwellers in all kinds of buildings by "Thermopane," the new insulating window glass developed by the Libbey-Owens-Ford Glass Co., Toledo. Since each glazing unit con-



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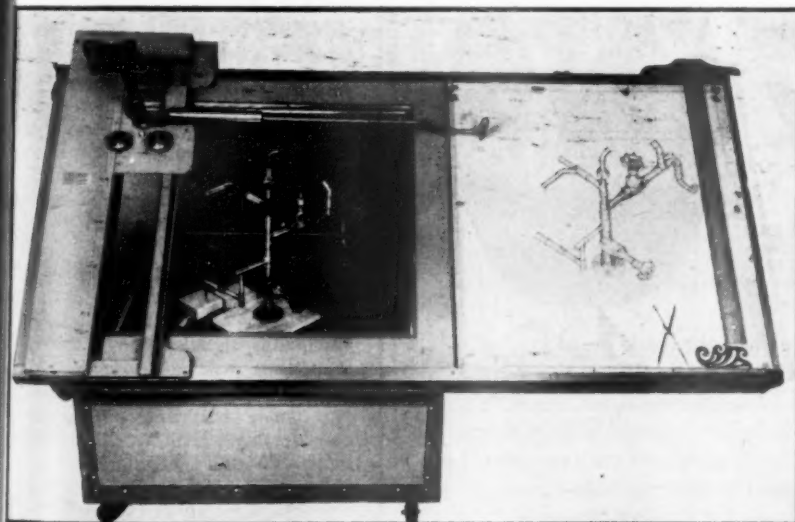
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One airport is using the new Sun-Vu Projection Drawing Machine to make scale renderings of damaged aircraft parts so accurate that new parts can be fabricated from them with speed and precision in the port's repair shop.

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KEEP ON BUYING WAR BONDS!

sists of two panes of polished plate glass which form an insulating sandwich with a "dehydrated air space hermetically sealed in by a special metallic glass bond around the edges of the glass," it will come precut to any given window dimension up to 35 ft.

Over-all thickness of resilient glazing is $\frac{1}{8}$ in., which includes an air space of $\frac{1}{4}$ in. Strength of the adhesion of the metal bond to glass is over 1,000 psi. Already in wide military use in a variety of thicknesses "protecting delicate instruments in Army Signal Corps trucks, guarding airfield traffic control towers against arctic cold and tropical heat, serving in tank observation windows, and inclosing bridges of certain ships," the material is expected to encourage better "daylight engineering" in present and postwar homes, office buildings, hospitals, and schools "where it is not convenient to take advantage of the double-glass insulation principle of storm sash above the first floor."

THINGS TO COME

Anyone who has seen the manufacture of collapsible tubes for toothpaste, cold cream, what-have-you, by impact extrusion will have a good idea of the speed with which aluminum-alloy cans may be made for the peacetime packaging of top-grade fruits, vegetables, and other commodities. A thick disk of the metal, fed automatically to an extrusion press, will get a quick squeeze, or "impact," from a cylindrical plunger, forming it instantly around the plunger to characteristic can shape, but without the side and bottom seams associated with present cans fabricated from tinplate.

Lighthouses will not discontinue their traditional visible beacons when military radar becomes a civilian commonplace, because the owners of a good many small boats will probably never go to the trouble and expense of equipping their craft with the electronic instruments necessary for receiving and sending invisible radar and radio signals. Larger boats and ships will all be equipped eventually if only because invisible signals will reach out to sea considerably farther than any light. Though navigators will be able to determine their positions electronically at any time, the careful ones will keep their celestial navigation equipment in good order for emergencies.

Jittery Street

Stock market grows more sensitive as it seeks answer to what lies beyond the invasion. Rallies are short-lived now.

Wall Street has shown increasing signs of jitters as the European invasion nears. Sensitivity of the market is being revealed more and more by sharp but short-lived sell-offs with only moderate recoveries.

• **The Question Marks**—What the market really is trying to do is to evaluate the effects of what lies beyond a military victory. The big question marks: contract termination, and the duration and expense of reconversion.

The Street isn't too sure now just how successful its evaluation will be. But it does look hopefully to more profitable years for investors and traders than those since Hitler's invasion of Poland touched off the war.

It is true that the stock market did respond to war's outbreak in 1939 by staging a sharp rally, accompanied by the heaviest trading volume in years; within a month the industrial stock price average rose 15%, and the long-depressed rail equities had an even sharper gain.

• **Didn't Last Long**—But in spite of this auspicious start, neither investor nor trader has found life particularly enjoyable since. The initial rally—even though it resulted in industrial price levels not reached since—finally was to prove of short duration. The rally had far too little substance behind it to withstand the ravages of momentous events to follow.

Although there were occasional rallies to break the speed of the fall, prices by April, 1942, under the impact of the fall of France, Pearl Harbor, the losses to the Japs in the Far East, etc., had dropped so far that stock market values reached the lowest levels in almost eight years.

• **Blinded Many**—Then, aided by the growing fears of inflation, as well as a string of Allied victories, the market staged a rally that lasted 15 months. This rally, in its last few months, blinded many traders to market dislocations that more astute Wall Street observers anticipated would come as an attendant circumstance of the final phase of the war in Europe.

In fact, the Street's congenial bulls,

as the rally progressed, predicted that further price advances would be seen as the Allied successes mounted. They became even more optimistic in the early days of the British-American invasion of Italy.

• **A Significant Decline**—The stock market's reaction, therefore, to the fall of Mussolini last July was of more than passing significance for investors and traders. This was not so much because of the precipitate drop in price levels, but more importantly because the serious decline definitely exploded the shibboleth that stock prices had been rising solely because of United Nations successes.

Obviously, the bulls were quick to deny that what had happened was anything but a temporary halt in the march toward higher price levels.

• **The Total Impact?**—However, investors had just witnessed how seriously the market had been dislocated by merely the first shadow of coming victory. They now began to wonder what the impact of total victory would be. And doubts arose whether corporations generally, and especially those most heavily engaged in making war materials, would be able to do as well financially in the postwar period, at least for

a time, as they had been doing the last year or two, despite the high level of war taxes.

Despite the slowness of the government in putting an all-out economic stabilization program in effect, many investors agreed that the inflationary factor had been kept under a reasonable degree of control. At any rate, inflation ballyhoo no longer was having the same effect that it had had earlier because of the debunking of the "inflationary-gap" scare.

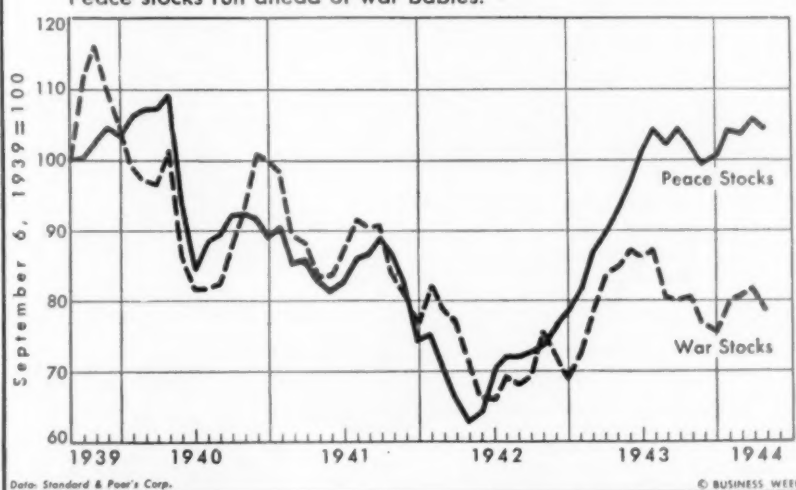
• **Portfolios Adjusted**—As a result, a number of investors following the Mussolini rollback of prices last July began to adjust their portfolios to withstand the market dislocations that many observers expect will accompany the final phase of the war in Europe.

And it is because of the switching from the so-called "war" issues to the "peace" group that the latter has been holding up better than average thus far in 1944 (chart, below).

• **Speculative Buying**—Despite the warning signals that the market has been giving at various times since last summer, however, there are still a goodly number of participants in the security markets who are still not averse to speculating.

According to many conservative elements in the Street, it has been this speculative buying that was so responsible for the sharp advance scored by various rail equities, second-grade bonds,

ANOTHER "GAP" FOR INVESTORS TO WATCH
Peace stocks run ahead of war babies.



In the long decline which the stock market staged after its initial rally at the start of this war, the so-called "peace" stocks proved as vulnerable as "war" shares. However, the similarity in trend changed sharply soon after the recording of the "war lows"

in 1942. This divergence has been noticeable since the rollback of stock prices last July. Investors began at that time to include the postwar period as well as the effect of reconversion on future earnings in making their appraisals of market values.

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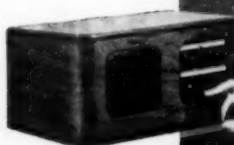
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and the defaulted issues earlier this year. Conservatives anticipate that profit-taking in this group at the last minute is quite apt to accentuate any drop in the market as a result of temporarily upsetting reverses during the early days of the invasion.

• **Backlogs of Cash**—Brokers and financial houses on the Street now are suggesting the building up of backlogs of cash in investment portfolios in order that investors will be in a good position to ride out any storms the stock market may experience from here on out. While this group does not doubt eventual victory, it does expect the market to be subjected to severe strains which will come as a result of the opening of the invasion.

Nor is this group certain that the market is as yet prepared for any speedy ending of the European phase of the global war, or for a rapid plunge into the midst of gigantic reconversion difficulties.

• **Dislocation Seen**—If the invasion should be delayed or be more difficult than expected, and necessitate the temporary postponement of all present reconversion plans, this group can visualize considerable market dislocation, particularly in the "peace" stocks.

The short position of 1,028,000 shares revealed by the end-of-March report, though the largest reported since June, 1938, in some quarters is estimated to have shown a 10% to 15% increase during April.

• **Possible Trends**—The Street's bulls make much of this short position currently as a market stabilizer in the event of any sharp break. However, those uneasy about possible market trends over the near-term would much rather see their clients protect themselves for a time by adding to their cash resources through the reduction of their market commitments.

DIVIDENDS "IN TRADE"

Baker Properties, Inc., a Minneapolis office building owner and an operator of other lines of business, seemingly prefers that its stockholders take their dividends "in trade."

Consequently, its directors have just declared a dividend on the 37,099 shares of stock now outstanding at the rate of 30¢ per share if cash is desired, or at the rate of 50¢ if stockholders will take merchandise, in lieu of cash, at either the Leader Department Store or Rossman Clothing Store, both of which Baker Properties owns.

Stockholders were issued merchandise certificates at the 50¢ rate. These can be used to buy goods or can be turned in for cash at the office of the company on a 30¢ per share basis.

Ward Reelects

Mail-order concern holds annual meeting, renames Avery. Opposition rallies only handful of votes against chairman.

In the swank Crystal Ballroom of Chicago's historic Blackstone Hotel on Apr. 28, holders of 5,822,040 shares (or proxies) of Montgomery Ward & Co. stock assembled for the 1944 annual meeting of shareholders.

The meeting had been switched to the Blackstone because of the presence of "trespassers" (page 17) on the company's property, headquarters of the nation's second largest mail-order business.

• **Avery Reelected**—Sewell L. Avery, chairman of the board, and all of his directors, were reelected. Avery himself topped the votes with a handsome 5,786,972 shares.

The best that two lone dissenters at the meeting could do was to record 36,612 shares for Marshall Field, merchant and publisher, and 20,492 shares for Harland Allen, investment counselor.

• **Sales Off 9%**—Avery said that "various matters before the United States

TO ALL MONTGOMERY WARD SHAREHOLDERS

Because of the presence of trespassers on the property of Montgomery Ward & Co., Incorporated, the annual meeting of shareholders called for 10:30 A. M. Friday, April 28, 1944 at the offices of the company will be immediately adjourned. The meeting will reconvene at the Crystal Ballroom on floor "B" of the Blackstone Hotel, Chicago, at 12:00 noon of the same day.

MONTGOMERY WARD & CO., INCORPORATED

To the few Montgomery Ward stockholders who might have missed the headlines, newspaper ads announced the emergency switch in time and place for the annual meeting.



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Sterling Elliott's first Patent was granted in 1874 when he was twenty-one years old. Harmon Elliott's first Patent was granted in 1911 when he was twenty-four years old. Harmon Elliott's latest Patent was granted in March 1944, so at the present time the Patent files of the Elliott Company contain 208 Patents, with the earliest Patent and the latest Patent exactly seventy years apart and with exactly 104 Sterling Elliott Patents and 104 Harmon Elliott Patents. We should be interested to hear from any other company in America which has had seventy years of constant invention.

Send now for "Unscrewing the Inscrutable," the fascinating 64-page book of valuable facts and delicious humor, by writing on your business letterhead to The Elliott Addressing Machine Co., 151 Albany Street, Cambridge 39, Mass.

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Elliott

ADDRESSING MACHINES

Court" prevented his discussing the company's labor troubles at the meeting. But he did discuss volume and earnings. Because of an eastern business which was larger than had been expected, sales in the three months that ended Apr. 30 (the first quarter in the current fiscal year) had slipped only

about 9% under year-earlier level. Earnings before taxes, he added, would run around \$7,500,000 (the highest quarterly net ever seen except for the same three months in 1922). After taxes, plus "ample allowance for strike expenses," earnings should total \$4,100,000 or around 72¢ a share on the

Earnings Stay at High Levels

Most reports for the first quarter of 1944 make good reading for stockholders.

Important among the factors which contributed to this situation were the facts that (1) although wartime production probably hit its peak in late 1943, industrial activity since has held well above year-earlier levels; and that (2) many managements deemed it unnecessary to set up out of profits the big reserves that were

deemed prudent last year, because this year they have more exact knowledge of tax requirements, and large sums already have been set aside for future contingencies.

Satisfactory earnings should be seen in the second quarter. However, changes in the war situation thereafter may sharply cut armament schedules, so early interim reports should not be accepted as a criterion for the entire year.

	1944		1943	
	Net After Taxes	Taxes	Net After Taxes	Taxes
Air Reduction	\$1,430,000	\$3,166,000	\$1,731,000	\$3,303,000
American Brake Shoe	589,000	1,000,000	581,000	1,300,000
American Machine & Metals	137,000	401,000	120,000	430,000
American Steel Foundries	311,000	1,504,000	711,000	4,553,000
American Agricultural Chemical	692,000	1,120,000	912,000	650,000
Beech-Nut Packing	639,000	1,665,000	670,000	1,320,000
Best Foods, Inc.	868,000	865,000	679,000	1,232,000
Bethlehem Steel	6,433,000	24,310,000	6,229,000	28,880,000
Bon-Ami Co.	215,000	142,000	270,000	207,000
Bridgeport Brass	321,000	1,492,000	364,000	1,551,000
E. G. Budd Mfg.	1,084,000	4,184,000	689,000	2,684,000
Butler Bros.	316,000	755,000	375,000	427,000
Climax Molybdenum	1,592,000	724,000	2,715,000	2,887,000
Container Corp.	570,000	1,968,000	377,000	1,003,000
Corn Products Refining	1,702,000	1,555,000	2,134,000	2,795,000
Robert Gair	134,000	477,000	154,000	263,000
General Baking	404,000	618,000	399,000	599,000
General Foods	3,628,000	5,800,000	3,580,000	5,359,000
Hercules Powder	1,138,000	2,883,000	1,378,000	4,969,000
Int'l Business Machines	2,495,000	7,160,000	2,440,000	5,767,000
Johns-Manville	1,452,000	1,954,000	1,087,000	2,463,000
Jones & Laughlin	1,708,000	2,417,000	2,359,000	6,398,000
Julius Kayser	194,000	389,000	177,000	248,000
Lehigh Valley Coal	500,000	194,000	404,000	187,000
Lehn & Fink	414,000	496,000	350,000	596,000
Libbey-Owens-Ford	2,412,000	1,627,000	357,000	238,000
MacAndrews & Forbes	165,000	200,000	128,000	128,000
Magma Copper	182,000	58,000	208,000	78,000
Marion Steam Shovel	123,000	413,000	91,000	365,000
Mathieson 'Alkali'	290,000	350,000	339,000	410,000
McKesson & Robbins	1,037,000	4,090,000	1,277,000	3,077,000
Mead Corp.	245,000	614,000	251,000	520,000
National Biscuit	2,710,000	4,748,000	2,632,000	3,831,000
National Gypsum	234,000	204,000	179,000	261,000
Nehi Corp.	118,000	304,000	127,000	273,000
New York Air Brake	204,000	370,000	207,000	271,000
Pacific Mills	450,000	3,301,000	350,000	2,663,000
Parmerlee Transportation	386,000	790,000	377,000	450,000
Procter & Gamble	3,478,000	Cr. 35,000	5,133,000	3,711,000
Shell Union Oil	6,808,000	10,503,000	5,067,000	7,753,000
Superheater Co.	862,000	1,347,000	365,000	685,000
Superior Steel	124,000	845,000	151,000	1,954,000
Texas Gulf Sulphur	1,926,000	1,631,000	1,760,000	1,123,000
Underwood Elliott Fisher	463,000	2,676,000	445,000	1,144,000
Union Carbide & Carbon	9,009,000	25,247,000	9,382,000	25,187,000
Union Oil of California	1,526,000	700,000	1,276,000	475,000
United Cigar-Whelan Stores	223,000	233,000	167,000	150,000
United States Steel	17,028,000	15,200,000	15,407,000	28,100,000
William Wrigley Jr.	1,544,000	1,111,000	1,713,000	2,176,000
Youngstown Sheet & Tube	1,636,000	4,222,000	2,147,000	6,761,000



"The Blueprints of that Fine New World of Tomorrow Must be Drawn Today!"

Statement by HUGH R. POMEROY
Executive Director
National Association of Housing Officials

"TODAY there are very few cities in which a planning commission, or a housing authority—or anyone else—is able to unfurl a set of blueprints or a set of charts and say: 'There they are—our plans for Area B, our plans for Area C, our survey of economic resources, our study of regional development, our analysis of population trends, our estimate of what housing the families of this community need, and what teamwork of private enterprise and public action is necessary to provide it.'

"There can be no denial of the fact that it is a long, hard job to make post-war plans now that will be realistic and comprehensive enough to be workable in 194X. But no matter how well recognized the difficulties are, it *is* possible for cities to be ready with orderly postwar programs. To prepare such programs requires time and hard work rather than conversation, and real money rather than mere good intentions. It requires intelligence, technical skill, and much patience and good will. And it requires an appreciation of the basic concept of planning that no one phase of city development, no housing or public works 'project,' can be considered only on its own merits, but must always be considered in its relation to other phases and other projects, all together directed to the service of the best interests of all members of the community.

"To add a job of this magnitude to the solution of our war problems may seem to be a big order, but cities the country over must realize the overwhelming necessity for starting *now*. There is no reason to believe that the job can't be done. Start planning with your architects and engineers *today*!"



- 1 Don't buy anything you can do without.
- 2 If you **MUST** buy, insist on dependable, long-lasting merchandise.
- 3 Take care of the things you have. Make them last.

These conservation rules can effect important industrial economies and enable you to increase your reserve of War Bonds.



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IN THE CLEAR

For more than 20 years, the Minneapolis & St. Louis Railway was in receivership; now it is the only Class I American railroad out of debt (BW—Mar.18'44,p69). Last week it retired

the last vestige of indebtedness when L. C. Sprague (left), president, presented a check for \$2,122,466.67 to Victor Rotering, Minneapolis First National Bank vice-president, who is the railroad's general counsel, C. W. Wright, witnessed the transaction.

The Minneapolis & St. Louis Railway Company
MINNEAPOLIS, MINNESOTA

AGENT NO. 4270
DATE APRIL 25, 1944

PAY TO THE ORDER OF
First National Bank of Minneapolis, Minneapolis, Minn.

TWO Million One Hundred Twenty-two Thousand Four Hundred Sixty-six and 67/100 DOLLARS \$2,122,466.67

TO THE TREASURER
THE MINNEAPOLIS & ST. LOUIS RAILWAY CO.
MINNEAPOLIS, MINNESOTA

L. C. Sprague
L. C. Sprague

common stock against the 70¢ earned a year ago.

• **The Opposition**—Frank W. McCulloch, an attorney who is industrial relations secretary for the Council for Social Action of the Congregational Christian Church, and the Chicago director of the Union for Democratic Action, as well as the holder of 100 shares of Montgomery Ward stock, provided the only real opposition to Avery at the meeting. McCulloch has been a consistent recent critic of Avery's management.

McCulloch reported, amidst much booing, that 200 stockholders owning almost \$1,000,000 of shares had written him that they disagreed with the management's recent actions. However, he admitted, under questioning by Avery, that he was unable to vote all the proxies he had because of his failure to file all the papers required under Securities & Exchange Commission's regulations governing the solicitation of proxies.

FIRE INSURANCE RATES CUT

Revisions in fire insurance rates, retroactive to Feb. 1, 1944, which will cut some \$7,150,000 from annual premium income of companies operating in the area, have been ordered by New York state's superintendent of insurance, Robert E. Dineen.

This order, it is estimated, will bring about an average state-wide reduction of around 10.7% in fire insurance premiums; savings in the New York City area will amount to about 6%, elsewhere about 13%.

Dineen emphasized, however, that the reduction shouldn't be considered to represent any "complete and comprehensive revision of rates along scientific lines." He said it was an "interim measure" designed "in the public interest to bring about—promptly—a reasonable and equitable revision of rates within the limitations of the existing rating system."

WAR BUSINESS HECKLIST

A digest of new federal regulations affecting priorities, price control, and transportation.

Increased Civilian Supply

Hot-type oil burners, the kind customarily used in water heaters, floor furnaces, and other small appliances, may now be purchased by consumers without a preference rating; delivery of fuel oil must, however, be authorized by the Petroleum Administrator for War before the burner may be bought (WPB Order L-74, as amended). . . . Types of various water heaters of the type commonly used in dairies have been freed from restrictions under WPB Order L-79, as amended, while other types of heaters have been added to List A, indicating that ratings are needed when equipment is to replace existing equipment that is worn out. . . . War Food Order 5.6 permits use of increased amounts of chemical nitrogen materials for straight application on crops in all states east of the Rockies.

Relaxation of Priorities

Under an amendment to Order M-21-i, WPB permits a receiver to accept up to 100 lb. of malleable castings of any one pattern or mold or a minimum production run, even if this increases his inventory above the previous limits of a 45-day supply. . . . The manufacture of 3½ cu. ft. portable construction concrete mixers is permitted by WPB's Schedule V, Order 217, as amended; heretofore, the smallest size allowed was 7 cu. ft. . . . To reduce man-hours required for making busways, WPB has lifted restrictions on the use of aluminum and zinc in nuts, bolts, washers, name and identification plates, and has permitted aluminum finishing or plating of cases, by amending Order L-273. . . . Elderberries and cantaloupes are freed for use in manufacturing alcoholic products as a result of War Food Order 69.

Selective Service Procedures

A summary of the steps that an employer should take to obtain full consideration for placement of essential employees has been issued by the WPB Office of Manpower Requirements. Copies of the publication, which is entitled "Advice to Employers Regarding Selective Service Procedures" (WPB release 546), may be obtained by writing to Room 501, Social Security Building, Fourth St. and Independence Ave., S. W., Washington, D. C.

Federal Excise Tax

Beginning May 6, retailers need not state separately on cash-register sales receipts the amount of the new 20% federal excise tax, DPA has ruled. Radio and printed advertise-



...the same extra endurance,
extra margin of safety—with
Ampco Metal Parts

Your nearest Ampco
field engineer can
help you...

Many pre-war standards of mechanical performance are obsolete today. The success of your post-war products depends on keeping pace with such wartime developments as the wider use of Ampco Metal production parts. . . . By using this superior alloy of the aluminum bronze class at critical points — where there is wear, impact, or corrosion — you get several times the life of ordinary bronzes, and avoid failures, breakdowns, costly repairs and interruptions of service. Get the benefit of Ampco's extensive war experience by consulting the nearest Ampco field engineer — let us engineer your specific applications. Call or write today.

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Ampco Grades 12 to 22 (special alloys of the aluminum bronze class) . . . Ampco (general industrial bronzes) . . . Special Custom Copper-base Alloys.

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A-4

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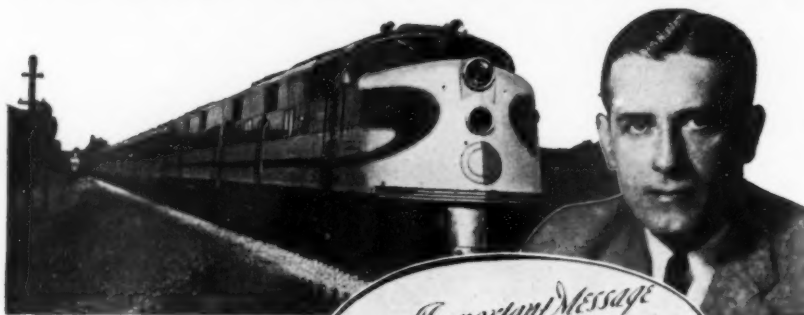

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Metal**
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POST WAR PROFITS

will BE AFFECTED BY

TRANSPORTATION COSTS



*An Important Message
to Manufacturers*
from PRENTICE COOPER
GOVERNOR OF TENNESSEE

Basic Advantages To Plant Locations In Tennessee

- ★ An unsurpassed variety of major industrial minerals and agricultural products.
- ★ Huge coal reserves making possible economical steam-power generation.
- ★ An inexhaustible supply of industrially suitable water.
- ★ Inland waterway system of three great rivers for low-cost transportation to Midwest, Gulf, and World ports.
- ★ Central location permitting 24-hour delivery to more than 51% of the Nation's population.
- ★ Excellent railway, highway, and airline transportation.
- ★ Cooperative skilled and semi-skilled native-born labor.
- ★ Opportunity for low-cost assemblage of raw materials or manufactured parts.
- ★ Uncongested plant sites near basic materials, river and rail terminals.
- ★ Ideal living conditions for both employer and employee.
- ★ Sound State tax structure. No personal earnings or sales taxes.
- ★ State and municipal governments friendly to industry.

TODAY'S merchandising demands short hauls and quick deliveries between buyer and seller. Long-haul transportation charges cannot be added to selling costs and meet postwar competition.

Factories, assembly plants, or distribution branches in Tennessee will be strategically located to serve more than 51% of the entire population of the Nation (within 500 miles of Tennessee) with low transportation costs and 24-hour delivery by rail, truck, or plane.

Low-cost transportation is only one of the many advantages to locations in Tennessee. Read the other **basic** advantages listed.

Manufacturers interested in meeting changing conditions, population shifts, and postwar competition should investigate Tennessee now.

Write for specific information and surveys relating to your particular requirements. Ask for illustrated book: "Tennessee—Land of Industrial Advantages."

Governor's Industrial Council, Department of Conservation
719 State Office Bldg. Nashville, (3) Tenn.

Investigate **TENNESSEE**
THE FIRST PUBLIC POWER STATE

ments must continue to state the tax rate. The amended action provides that the tax applies to all nonalarm clocks, not just to alarm clocks that retail for more than \$5, as was previously stated in order. (Amendment 1, Supplementary Order 85.)

Paperboard Containers

To halt runaway prices of secondhand corrugated and solid-fiber paperboard shipping containers, OPA has set new special dollar-and-cents ceilings on these articles which in some cases cut prices by more than half. New ceilings, which vary with the condition of the container, are approximately 80% of the cost of the containers when new. (Regulation 529.)

Any manufacturer who has in hand unfilled orders for V-boxes (weatherproof, solid-fiber shipping containers used by the Army and Navy for overseas transportation) must use his equipment for solid-fiber container production to manufacture only V-boxes until his order is filled, regardless of preference ratings of other orders. Producers who do not have enough V-board to meet the V-box orders should notify WPB's File Box Section, Paperboard Division, Washington 25, D. C. (Direction 2, Order M-290.)

Wrapping Paper

WPB has announced that civilians will receive in the second quarter of 1944 only half as much wrapping paper and bag paper as they had in the same quarter of 1943. Total second-quarter production (269,000 tons, as compared with 302,000 tons in the first quarter) will be about 23% less than the output in the second quarter of 1943, according to the Forest Products Bureau of WPB. Some relief for civilians is looked for in an expected increase in the output of substitute wrappings, to be undertaken by paper mills that do not usually produce these goods.

Electronic Equipment

Materials obtained with priorities assistance under Preference Rating Order P-45 may be used to make experimental electronic equipment, provided it is for the use of the person who holds the rating. If the equipment is for transfer, or for commercial use, the producer is subject to the limitations of paragraph (b) (1) of WPB Order L-265 (Interpretation 2, Order L-265.)

Aluminum

To encourage the movement of excess inventories of aluminum—chiefly held in obsolete shapes by airplane manufacturers—WPB will now permit people who have not before distributed aluminum to acquire it from such idle stocks and dispose of it under the restrictions applying to existing distributors. If an individual has entered the business since Apr. 1, 1944, he may place orders with producers, upon approval by WPB. "Distributor" has been redefined to include everyone buying surplus stocks under Supplementary Order M-1-j for resale. Distributors are no longer required to reject



American Red Cross
Kansas City, Mo.
James B. Clow & Sons, National Cast
Iron Pipe Co.
Tarrant, Ala.
General Motors Corp.
Pontiac, Mich.
Gorham Manufacturing Co.
Providence, R. I.
John W. Hobbs Corp.
Springfield, Ill.
International Chain & Mfg. Co.
York, Pa.
International Equipment Co.
Boston, Mass.
International Steel Co.
Evansville, Ind.
Lovejoy Tool Co., Inc.
Springfield, Vt.
Metals Disintegrating Co., Inc.
Verona, N. J.
Nice Ball Bearing Co.
Philadelphia, Pa.
Parker Rust Proof Co.
Morenci, Mich.
Republic Aviation Corp.
Evansville, Ind.
Signode Steel Strapping Co.
Chicago, Ill.
The Studebaker Corp.
South Bend, Ind.
Torrington Co., Westfield Mfg. Co.
Westfield, Mass.
United Specialties Co.
Chicago, Ill.
The United States Finishing Co.
Norwich, Conn.

(Names of winners of the Army-Navy and Maritime Commission awards for excellence in production announced prior to this new list will be found in previous issues of Business Week.)

single orders of specified amounts of aluminum forms and materials. (Supplementary Order M-1-j; CMP Regulation 4, Amendment 1.)

Rubber Thread

Maximum prices for sales to the Defense Supplies Corp. of bare rubber thread, yarn-covered rubber thread, and elastic web and braid have been announced by OPA. Bare rubber thread will be priced, with some exceptions, at the levels of Oct. 1, 1941. Rubber thread covered with yarn may be sold by a manufacturer or a coverer to DSC at either the manufacturer's or coverer's Oct. 1, 1941, list price, or—if he had no list price on that date—at the Oct. 1, 1941, list price of the U. S. Rubber Co. of New York. (Order 14, Revised Regulation 204.)

Imported Beverages

Importation of aged rums three or more years old has been authorized by WPB. Imports will be accepted without restric-

tions from any country except the French West Indies; action covering these islands is expected soon. Imports from U. S. possessions, including Puerto Rico and the Virgin Islands, are not covered by the order.

Imports of beverage cane spirits into Puerto Rico, the Virgin Islands, Hawaii, and Alaska have been placed under the beverage cane spirit import control order. This action was taken by WPB to plug a loophole which allowed beverage cane spirits to enter this country freely by way of its possessions, although the intention of the order was to control all imports. (Order M-374, as amended.)

Fur Skins

Substantial reductions in the prices of fur skins are expected as a result of OPA action placing all sellers of fur skins, with a few exceptions, under one regulation, beginning June 23. Sales of dyed and dressed Alaska sealskins, dressed blue and white Alaska fox pelts, and specified sales of furs or peltries pelted outside the United States are not covered. Since fur garments are priced on a cost-plus basis, the action will mean reduction in prices for the garments as well. The new base period is Oct. 1, 1941, through Apr. 30, 1942, instead of March, 1942, as formerly. Sellers may apply to OPA for adjustments if their prices are out of line; they must apply to OPA for prices of types that they did not deliver during the base period. (Amendment 125, Revised Supplementary Regulation 14.)

Rationed Foods

As a result of seasonal improvement in the butter supply, OPA has cut the number of ration points a consumer must pay, from April 30 to June 3, for a pound of creamery butter from 16 to 12 points; margarine points are cut from 6 to 2 per pound. Forty percent of May butter output and 50% of June butter output are reserved for direct war uses under War Food Order 2.1. Point values of choice cuts of beef have been raised slightly for the period April 30-June 3; lamb and mutton points have been decreased about 50% to permit quick movement of lambs from drought areas.

In processed foods, OPA has added eight new vegetables to the point-free list to help retailers clear out old stocks.

Trade point values are altered to reflect changes at the consumer level.

Tires

Since allocations of new passenger-car tires to civilians have been substantially increased by the Office of Rubber Director, Price Administrator Chester Bowles has widened eligibility for new tires to include all "B" and "C" ration-book holders. Previously, only holders of "C" rations were generally eligible. Holders of "A" rations are now eligible for used tires (Grade III) in areas where such tires are still available. Those light delivery trucks (such as ice cream trucks, retail store merchandise delivery trucks) which formerly could obtain used tires only may now buy new passenger tires. (Amendment 76, Ration Order 1A.)

Importation from Latin America of a



One vital factor

In most chemical research and production, accurate temperatures must be arrived at or maintained. The range may be from the cold of dry ice to the heat of white-hot metal.

American Thermometers, of enduring accuracy, are made for every possible application in the chemical industry. Some are for "on the spot" recording; others may be placed as far away as 200 feet from the source of heat.

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The red-reading mercury, wide-angled scale and glareless glass of the type of thermometer illustrated above, make for quick, easy reading.

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**...Are you protecting
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Many tool makers... die makers... master mechanics... expert lathe operators and other much-needed skilled workers could be helping the war effort and their former employers right now if it hadn't been for eye accidents—which could have easily been avoided.

There is an indisputable moral in this condition for those companies that have not yet lost key workers, even though failing to provide them with goggles: *don't continue to take chances with the law of averages—install an employee-protecting, money-saving goggle program NOW!*

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American Optical
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limited supply of new natural rubber tires and tubes for passenger cars and trucks has led OPA to set dollar-and-cents retail ceiling prices on these items, with specific discounts for wholesale maximum prices. Price levels are in line with those for domestic natural-rubber tires. (Order 14, Revised Regulation 143.)

Excursion Boats

Commercially operated steamboats used for pleasure cruising, guiding, or fishing parties may obtain larger rations of heavy residual oil this summer, provided the Office of Defense Transportation approves of the increase. Oils affected are Grades No. 5, No. 6, and Bunker "C" fuel oil having an American Petroleum Institute gravity of 20 degrees or lower. (Amendment 3, Revised Ration Order 11.)

Imported Pulpwood

To insure a continuing supply of pulpwood from Canada and to rectify the situation with regard to the Canadian domestic supply that has resulted from no U. S. price controls, OPA has established ceiling prices, for the first time, on pulpwood imported into this country from Quebec, New Brunswick, and Nova Scotia. Prices will be the maximum dollar-and-cents ceilings set in Canada on Feb. 2, 1944, for sales in Canada, plus specified markups. Contracts made on or before that date are exempt, as are imports by U. S. firms from their subsidiaries incorporated in Canada, and any purchase by the United States government or its agencies. Prices represent a reduction from existing levels, but the Timber Controller and the Wartime Prices & Trade Board of Canada have promised the War Production Board to make 1,250,000 cords of pulpwood available for import into the U. S. in 1944. The United States may also import additional quantities equal to half of any market pulpwood that is produced in Canada in excess of 2,500,000 cords produced for both Canadian and United States mills. (Regulation 530.)

Brass Mill Products

Deliveries of brass mill products from warehouse stocks will be subject to a new restriction beginning May 15. The amount of brass mill products that may be ordered by any one person for delivery to any one destination in a calendar week will be limited to 500 lb. gross weight. Exemptions are single continuous lengths of rod, tube, pipe, sheet, and strip. The former 2,000-pound monthly limitation is retained in the amended order; however, neither it nor the new restriction applies to condenser tubes or to resale of brass mill products that have been obtained by a warehouse through WPB authorization. (CMP Regulation 4, as amended.)

Industrial Oils

May allocations of refined grades of wool fat are 100% of requirements except to cosmetic manufacturers, who will receive in May and June about the same amount

lanolin as they received in March and April (84% of 1941 deliveries for that purpose). In view of heavy demands for the grade known as degreas, the War Food Administration has limited allocations of this wool fat to the most essential users. Users rated in Classes 1, 2, and 3 for degreas will get 100% of requirements; users rated in Class 4 will get 80%. Restrictions on oil and pressed neat's foot under WFO-18 have been suspended.

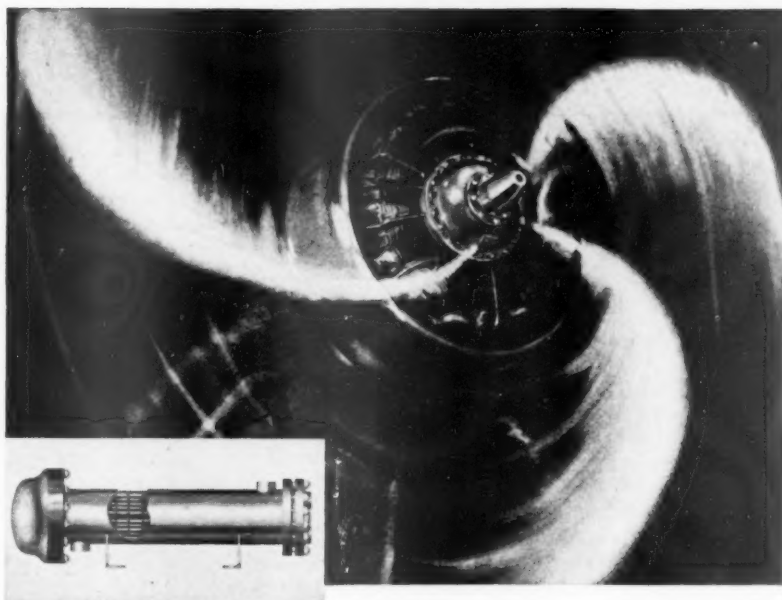
Other Priority Actions

WPB has placed a 45-day inventory limit on sprocket chains, attachment links, and sprocket chain wheels by amending Order L-193-a. . . . To conserve labor and insure continued production of standard discs for harrows, WPB has restricted the manufacture of cutaway discs and coulters blades to use in "brush and bog" harrows, since these special types require more labor than standard discs (Direction 1, Order L-257).

Direction 2, CMP Regulation 5, allows manufacturers of footwear to treat all types of steel staples, as well as steel wire, as operating supplies, which are procurable under the MRO symbol. . . . To tighten controls over wheel-type tractors with construction machinery attachments for other than farm use, WPB's Direction 2, Order L-257, requires that after May 12 applications for authorization to buy such equipment must be filed only on WPB Form 1319; construction machinery attachments are subject to Order L-192. . . . The Toy Industry Advisory Committee has been warned by WPB that no rubber can be made available for toys until military demands for rubber decrease radically; the use of "mud," a residue that is a byproduct of reclaimed rubber, is not restricted. . . . Manufacturers of cheddar cheese must set aside 60% of their output during the months of May and June for government purchase; this is the highest set-aside requirement that has been announced for this year (War Food Order 15.7).

Other Price Actions

Amendment 15, OPA Revised Price Schedule 4, establishes maximum prices for imported iron and steel scrap at the same levels as those applying to domestic scrap, and removes the requirement that prior approval of two government agencies be secured before purchase is made. . . . To provide better distribution of poultry throughout the year, OPA has announced seasonal increases in prices at all sales levels for chicken and other fowl (Amendment 28, Revised Regulation 269). . . . Through Amendment 126, Revised Supplementary Regulation 14, OPA has considerably reduced prices for Cuban and Mexican packed pineapple delivered at Chicago. . . . Softwood lumber prices at places of entry into this country at the rates set on Hawaiian pineapple delivered at Chicago. . . . Softwood lumber imported from Russia has been brought under the coverage of OPA's north-eastern softwood lumber price regulation to provide more uniform and equitable maximum prices for this commodity (Amendment 1, Second Revised Regulation 219).



How to speed up aircraft engine testing

AIRCRAFT engines as they come from the assembly line must be tested thoroughly under actual operating conditions. Heat in the wrong place at the wrong time can seriously delay production.

For instance, the engine is placed in test cells and connected to fuel and oil lines. If the oil is cold, time is lost while heat is added to bring the temperature of the engine to actual operating conditions. On the other hand, as one engine after the other is tested, heat is added to the oil. Thus actual operating conditions are destroyed. More time is lost while the heat in the wrong place is dissipated.

To make heat an aid rather than a time waster, one large aircraft engine maker installed Trane Shell and Tube Heat Exchangers.

These versatile heat exchangers apply steam to warm the oil to proper temperature before testing operations begin. Then, reversing themselves, they constantly keep the temperature of oil at actual operating conditions by cooling it with cold water. In this way, aircraft engines are tested in the quickest possible manner.

Actually, heat is exchanged for more aircraft engines.

The Shell and Tube Heat Exchanger is but one of the many products of The Trane Company, manufacturing engineers of heating, cooling and air handling equipment. This application is but one of hundreds to which Trane Products are being applied in today's battle of production. Tomorrow Trane Products using the same principles of heat exchange will be applied to processes that will make a better world in peace.



TRANE

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AIR CONDITIONING • HEAT TRANSFER • AIR HANDLING EQUIPMENT

MARKETING

Retailers Irked

They want definite action, not merely promises of relief from OPA's highest price line order. More delay is likely.

Newspaper headlines which indicated last week that OPA's famous highest price line limitation would be modified did not appease irate retailers who have long regarded MPR 330 and other similar orders as the most objectionable regulations in the price control program.

• **But It Doesn't Work**—In theory, these restrictions hold prices down by forbidding retailers to carry higher price lines than they sold in the base period. In practice, the device has not been so successful because low-priced clothing has virtually disappeared (BW—Sep. 25 '43, p92).

To retailers of these lines, the statement of Chester Bowles, price administrator, last week was less a promise of relief and more a study in maneuvering—and a masterpiece of timing.

• **Hopes Revived**—In general, retailers have not found their testimony concerning amendment of the Emergency Price Control Act too sympathetically received in Washington (BW—Apr. 22 '44, p17). But sellers of low-priced clothing, both chain and independent, had high hopes that the case presented by Robert A. Seidel of the W. T. Grant chain would bring them relief from the highest price line limitation.

Seidel previously had impressed official Washington by documenting the plight of merchants who find themselves limited to price lines no longer available, while their department store competitors can sell the cheapest available goods at higher markups than those employed by Grant and other similar chains.

• **Bowles Looks Ahead**—Accordingly, when Seidel appeared last week before the House Banking & Currency Committee, congressmen showed more interest and more willingness to do something about the problem than at any time during the hearings before both Senate and House committees.

Apparently Administrator Bowles had foreseen all this just as had the retailers. At least it looked as though he had earmarked Seidel's testimony as the most articulate. For he released his statement on the report of a special committee investigating the highest price line lim-

itation on the very day on which Seidel testified. The timing was widely regarded in the trade as designed to take the wind out of Seidel's sails.

• **Another Committee**—As one retailer put it, Bowles gave Congress the impression that no amendment need be put into law since it was obvious from the administrator's statement that OPA understood the situation and would take care of it. But, as if to make sure, Bowles turned the report over to another committee on consumer goods, to report in 30 days—and by that time it is expected that the price control act will have been renewed.

OPA has proposed that the highest price line limitation be lifted to the level necessary to give the retailers access to the same percentage of any given line of goods—dresses, suits, children's clothing, etc.—that was available to them in the base period.

Thus, if a store sold \$2.98 dresses as its highest price line before the war, and if dresses at \$2.98 or below represented 15% of the industry's total output, the store's highest price line level could now be raised to whatever price level is necessary to provide access to 15% of dresses being made today.

• **Asks WPB Aid**—But retailers do not expect action in time to relieve the present situation. Bowles indicated that he intended to exhaust all possibilities for increasing the supply of low-end

goods at the manufacturing level first. He has enlisted the aid of the War Production Board in this, asking Chairman Donald Nelson to allocate inexpensive textiles for the program.

Retailers are cynical about this. So far, no effective control at the manufacturing level has been realized. Manufacturers, like retailers, are held to their highest line. But there is nothing to prevent them from dropping everything but the highest line.

• **Out and Back Again**—Even more elusive is the problem of manufacturers who go in and out of business to change price levels. Buyers are apt to find that a company which sold its frocks for \$4.98 has disappeared, and that the proprietor has hung out a new shingle and has a new supply of price tags marked \$8.98.

Moreover, as retailers see it, the flow of low-end goods will not be increased until textile prices are brought under stricter control. This entails going back through converters and jobbers (BW—Apr. 22 '44, p89) to the textile mills. And if WPB forces the mills to turn out more low-end fabrics, it must either force them to operate at a loss, or settle for one more industry that ticklish question of subsidies.

• **Retailers Discouraged**—From experience in other fields, it is fair to assume that these and other problems related to achieving a prewar supply of low-end goods would take some time to resolve. Hence retailers are betting heavy money that the war will be over before they get the relief they seek under the highest price line limitation.



Robert Seidel, representing W. T. Grant Co., exhibits women's clothing before the House Banking & Currency Committee to illustrate why retailers who sell low-priced clothing don't like OPA's highest price line limitation.



Report No. 5 on
HONESTY ENGINEERING
—a new idea in
Personnel Relations

**"and it's a big help in cutting down
employee turnover"**

STATEMENTS like that are typical of what personnel managers say about Honesty Engineering. Because by helping employees resist the temptation to turn dishonest, it prevents loss of hard-to-replace employees. One food processing concern, for example, found that this new Personnel-Protection Plan cut manpower losses due to dishonesty by more than 75%.

Based on experience, the U. S. F. & G. Personnel-Protection Plan not only insures you against financial loss through employee dishonesty but:

(1) discloses undesirable personnel and prevents waste in training; (2) applies tested methods that keep good employees from going wrong; (3) helps employers eliminate leaks, pitfalls and careless acts that may lead to employee dishonesty.

Whether you employ 10 people or 10,000, your U. S. F. & G. agent will be glad to show you how the Personnel-Protection Plan helps you keep your employees by keeping them honest. Consult him today.

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Is Your Estate Liquid?

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Television Split

CBS brings into the open the trade struggle over telecasting standards, and now it's Columbia against the field.

Television, the industry has agreed, must pull itself up by its own straps. But there was anything agreement last week as to where the next haul should come.

• **CBS Takes a Stand**—The ruckus began when the Columbia Broadcasting System assembled some 250 representatives of the press at a luncheon on the eighth floor of Manhattan's Waldorf Astoria Hotel, and announced the network's stand.

CBS's policy announcement brought into the open for the first time the latent trade struggle over telecasting standards: Shall they be prewar standards? Or will they reach the improvement plane made possible by the myriad electronic developments of war?

• **Where They Split**—Columbia has a policy for the latter. Virtually every other company in the industry disagrees. The catch is that establishment of new superior standards would render all existing equipment useless. And the industry's investment is not small—around \$20,000,000 for equipment to put television on the air. And the public bought about \$2,000,000 of receiving sets before war halted production.

But CBS argues that it is better to scrap existing equipment than attempt some five or ten years hence to scrap two or three times as much transmitting equipment, and a possible \$200,000,000 of receivers. Such a policy, CBS implies, would be tantamount to deliberate obsolescence.

• **Small Investment**—The rest of the industry points out that CBS, which has no affiliation with an equipment manufacturer, has a relatively small investment in existing television. Columbia spent around \$500,000 installing a commercial transmitter; but the investment of the National Broadcasting Company's parent company, Radio Corp. of America, pioneer in the field, is many times that.

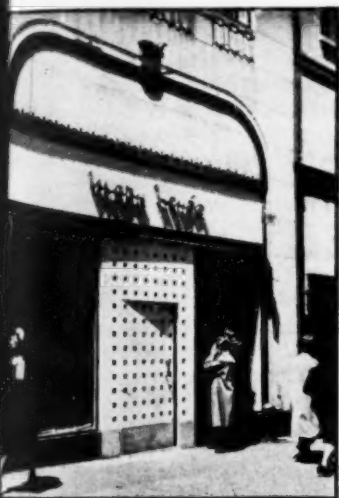
When the argument really got heated, CBS is charged with delaying tactics while it waits to take a free ride on other people's research. In rebuttal, CBS observes that it is just a buyer looking for the best possible equipment, hasn't anything to sell, isn't trying to button up a market to capitalize on present investment in research.

• **Battle of Megacycles**—If CBS were to have its way, commercial television

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be delayed at least a year after war while leading engineers adapt developments of war to an improved television, and it would mean new bands for television broadcast stations. At present the band for a station is six megacycles (6,000 cycles) wide, in comparison with ten kilocycles for a radio station or 1,200 kilocycles to accommodate the entire present broadcasting band. But for high definition television, according to CBS engineers, channels should be over twice as wide, they propose 16 megacycles. And the new bands necessarily would be at the higher frequencies (above 200 megacycles). The 100-megacycle level is to be regarded as the top, but after the war began, engineers have begun to utilize the higher frequencies for all kinds of radio communication, assuring for the first time that there will be room in the spectrum for adequate channels for AM, FM, television, facsimile, and all the other radio communications—ships, police, amateurs, point-to-point, Navy, and commercial services.

CC Split, Too—A difference of opinion parallel to that in the industry came



COLOR DRAWS FIRE

center of a teapot tempest on Manhattan's Fifth Ave. is the yellow doorway fronting quarters of the newest Lewis dress shop. Unable to spare on critical materials, architects installed a wooden arch with tiny glass panes and painted it "jonquil yellow." Almost before the paint dried, realtors began registering complaints of neighboring "shoppes" which think the plain yellow too flamboyant for their sedate district.



Illustration shows COMMERCIAL CONTROLS Metered Mail Machine

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YOU'VE heard plenty about the coming air age. All indications today point to a tremendous expansion in air service—passenger, freight, express, mail. And it is more than possible that all of your mail will "go by air."

Be sure you get the full advantage of this flying speed in mail delivery after the war. Don't let a slow, old-fashioned mailroom in your own office hold things up.

The postwar mailroom must have modern, mail-handling equipment to keep pace with a new faster-moving

business world! It will be "the heart of every office," as important as any other department. So plan it *now*—and plan it well, with the aid of a COMMERCIAL CONTROLS specialist.

When Victory is won, we will again produce equipment for Complete Mailroom Service to help put "wings" on your mail in the coming air age.

Metered Mail Systems . . . Postal and Parcel Post Scales . . . Letter Openers . . . Envelope Sealers . . . Multipost Stamp Affixers . . . Mailroom Equipment. (Many units available.)

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She's Found 101 New Uses For SPEEDI-DRI

SPEEDI-DRI is the finest product of its kind for removing oil and grease from floors; setting up a non-skid surface, and retarding fire. But 101 new uses for **SPEEDI-DRI** have been discovered! **SPEEDI-DRI** reclaims oil-soaked rope and power belts; reconditions oil-soaked shoes and clothing; deodorizes the plant; removes oil film from tools; is used during tumbling and after heat-treating processed parts to remove oil-film; increases light reflection in dark plants; helps prevent dermatitis caused by oil-soaked shoes; dries up floors that "bleed" in hot weather; better than sand in fire buckets. You'll discover many other uses for it, too. It's indispensable! Write at once for literature and **FREE SAMPLE**.

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Midwest & South — Waverly Petroleum Products Co., Philadelphia 6, Pa.
West Coast — Waverly Petroleum Products Co., Russ Bldg., San Francisco 4, Calif.

SPEEDI-DRI
OIL AND GREASE ABSORBENT



to light this week in the Federal Communications Commission. Chairman James L. Fly, substantially based on Columbia's stand, accused manufacturers of wanting "to sell a lot of product without regard for the opportunity to offer the best possible service to the public."

He said the opinions of E. K. Jett, newest commissioner and former engineer of the FCC, which were made public last week "helped to muddy the waters." Jett envisioned operation of television on prewar standards in the immediate postwar period, with gradual development of improved standards alongside the old.

Milk Plan Upset

OPA gets injunction to block New York state's attempt to raise price above ceiling. Policy is blamed in issue.

The New York State Dept. of Agriculture is not faring too well in its attempt to establish a minimum price for milk in the Hudson-Mohawk area (Albany, Troy, Schenectady) 60¢ a cwt. above the OPA ceiling.

• **Sets Precedent**—In a precedent-making contest between state and federal regulation powers over prices, the Office of Price Administration last week secured temporary injunctions against C. Chester DuMond, commissioner of agriculture, and 56 dealers in the area to prevent above-ceiling sales on May 1, when the state order was to become effective. The OPA ceiling in the area is \$3.40 a cwt. plus a 60¢ federal subsidy, prior to this week's reduction (page 57). The state order would have established a minimum price of \$4.10 plus the same subsidy for top-grade fluid milk which would have raised the average price for all pool milk—including that used for manufacturing purposes—to substantially above the OPA ceiling. In the Hudson-Mohawk area, practically all milk is sold as fluid milk and would rate the top price.

The restraining order came from a federal court while the New York state attorney general was mulling over the idea of rescinding the agricultural commissioner's order on grounds of unconstitutionality. This would have been a graceful out for New York, since OPA had declared its intent to fight the new price.

The only similar cases have been settled out of court and a year ago when Pennsylvania fixed a minimum price above the ceiling, the state, after a warning from OPA, avoided court action by

postponing the effective date of its order until OPA would consent.

The action of the commissioner, a survey appointee, has been widely attributed to politics. Critics claim the whole incident was merely a ploy for the vote among OPA's enemies in the forthcoming presidential election.

Pool Arrangement—Actually, the political situation is local rather than national in significance, for under a pool arrangement two large co-ops would have benefited at the expense of smaller co-op and a number of independent producers.

The pool plan, as it functions in New York state, permits payment to cooperative organizations of a few extra cents per hundredweight in order to promote their activities—a technique encouraged by the federal Capper-Volstead act. These payments are of a varying amount, and under the Hudson-Mohawk plan, two co-ops would have collected handsomely.

Fought the Plan—The less favored co-op and the independents didn't like the prospect; so they fought the plan. At a referendum conducted by the state, however, the plan got approval from 77% of the producers, thanks to an attractive \$4.60 price—60¢ above the OPA ceiling—which was to be paid on milk if the State Dept. of Agriculture plan were approved.

If OPA had let the \$4.60 price go unchallenged, similar violations probably would have spread rapidly. New York's Dept. of Agriculture, for example, was planning to boost the price in both the Buffalo and the Rochester areas.

JUDGE SLAPS OPA

In a decision reversing an order of OPA which suspended for one year the gasoline allowances of the Automobile Sales Co. of Memphis, Tenn., a federal judge last week ruled that enforcement of war measures should not be used as an excuse to relax fundamental principles and rules of evidence formulated by the courts to prevent miscarriages of criminal justice.

OPA had charged that the Memphis concern had illegally obtained gasoline from a Troy (N. Y.) ration board to transport used cars to Memphis. OPA agents halted the convoy in Ohio, and issued an affidavit from the driver in which he charged that he was employed by the Memphis company.

The affidavit was the basis of the OPA finding, although the maker was not made available for cross examination. Judge Emerich B. Freed of the Northern Ohio district held that this was tantamount to convicting on an accusation and enjoined OPA from enforcing the suspension.



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TODAY AND TOMORROW



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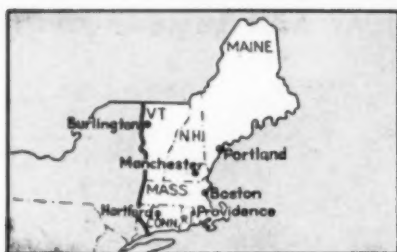
The Seaboard, a key railroad serving North Carolina, is proud of the constructive part it has played in the economic progress of the State. Through its Industrial and Agricultural Development Departments, as well as through other agencies of the Railway, the Seaboard will continue to plan and work with North Carolina for the brighter world of tomorrow. Seaboard Railway, Norfolk 10, Virginia.



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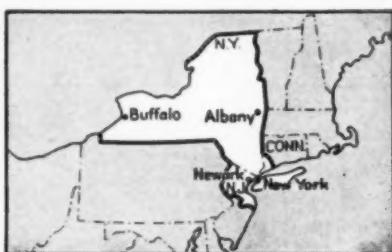
THE REGIONAL MARKET OUTLOOK

A summary of industrial, agricultural, and other trends affecting the income and general business prospects in the twelve Federal Reserve districts of the nation for most recent month. (Last month's report: BW—April 4, 1945)



• **Boston**—Though cutbacks have played some part in whittling New England factory employment over recent months, instances of labor shortages still exist. In particular, workers for ball bearings and heavy labor for tire manufacture are still badly needed; needs are rising in radio and allied industries, but are being better filled. Also, some expansion is under way: The Navy will spend \$50,000,000 for coastal facilities, new engine contracts are pouring into the crowded Hartford area, and new facilities are being built at Naugatuck, Conn., for synthetic rubber latex. Incidentally, in four years, Maine has lost 7.3% of its civilian population, Vermont 11.5%, and New Hampshire 7.7%.

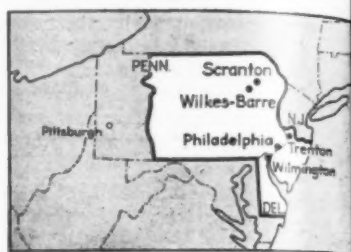
The record potato crop boosted Maine's farm income over 1943's in January, and high receipts from milk lifted income in Rhode Island and Connecticut. Farm returns elsewhere are lagging behind last year's.



• **New York**—Most labor markets are still tight. Bridgeport, Conn., is busy again on aircraft parts contracts. Buffalo is losing a net of 1,500 workers a month in out-migration. Syracuse needs 2,300 more for replacements. Jamestown is short 400 for textiles, despite cutbacks. And so on.

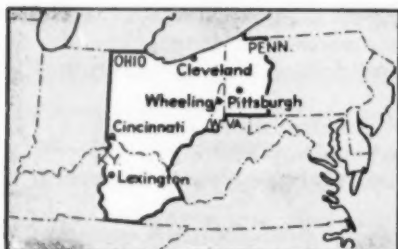
Northern New Jersey activity is at peak levels, held back only by labor shortage. However, plants hope to recruit 10,000 more workers from New York City, chief labor source so far. Minor new plants under way are for airplane testing at Woodbridge, Navy power equipment at Harrison, and gasoline cracking at Bayonne.

So strong has been the belated arms upsurge in New York that factory jobs here have risen over the past year, despite population losses now amounting to over 500,000 in four years. In addition, employment is up in shipping, amusement, commercial, and other work.



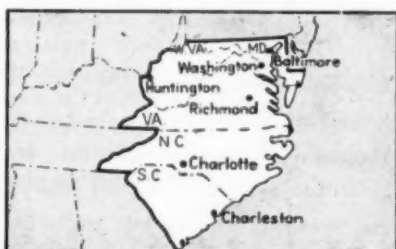
• **Philadelphia**—Manpower needs are large in the region, particularly in the shipyards along the Delaware. For example, the draft may pluck 3,000 to 4,000 men out of Chester yards, and many will be irreplaceable. The radio industry, in the same local area, also is short of labor. And production starts this month on rayon tire cord at Marcus Hook, Pa. War jobs are also stepping up in the Scranton-Wilkes-Barre area, which, however, has lost more than 20% of its civilian population during the war; hard mines there are busy, too.

Farm income in the district is running a bit higher than last year—but again, gains are not up to the national average. The cream is off the rise even in Delaware where the weakness in egg markets hit hard. But agriculture contributes under 10% of the region's income, and even in many rural sections, industrial payrolls in the towns are more important.



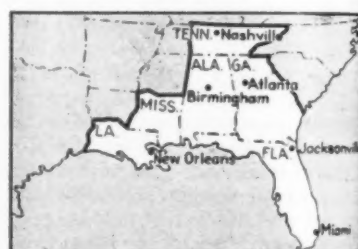
• **Cleveland**—New war emphasis on big guns, shells, and metal packing for shells will be felt sharply here in America's Ruhr, because of the work's close relation to steel fabricating, a district specialty. As samples, Weirton's forge works will hire 1,500 extra workers, 3,000 others are wanted at once for Pittsburgh and nearby foundries, and a new large foundry will open in Lima. Other munitions needs center on a possible tire cord factory at Martins Ferry, a new ball bearing plant at Zanesville, orders for gun carriages and mill equipment at Youngstown, aircraft work at Cleveland, and rubber at Akron. Civilian lines—paper, potteries, lumber yards, wool clothing—are being squeezed tighter than ever for manpower.

Spring plantings have begun; wet weather caused delays, but warm and sunny days have come along since. Labor is expected to be scarce for summer canning and food processing.



• **Richmond**—"Cutback jitters" among war workers are intensifying manpower problems just when labor needs are rising. For instance, out-migration is greater than in-migration in Baltimore; when gun mount and ship repair work slackened, workers returned to homes, many to North Carolina where new jobs were opening up. Rumor had 10,000 released in one plant; instead, 4000 more had to be added. Much the same applies to Hampton Roads, where an employment ceiling at the January level has had to be imposed because of heavy draft inroads. Charleston Navy Yard needs 4,000 more workers too. New plants are for rayon cord at Scottsville and milk processing in Appomattox County, Va.

Rain and cold weather have delayed spring plantings and have damaged potatoes, tobacco, and fruit trees. North Carolina's winter wheat crop is its second largest. Farm and canning labor will be big problems.



• **Atlanta**—Oil figures as an ever bigger factor in income here. The biggest eastern boom was brought in last month in Mississippi, spurring the boom in leasing all through the sixth district. And leasing alone pays a price—even if real production of the oil itself never starts.

In other respects, trends are unchanged. Early spring weather was not too favorable to crops, but current farm receipts are running high. Soldiers are still moving overseas, and construction now is all but unbundled.

Workers are especially needed for the local superbomber plant. In general, manpower is scarce, though the 48-hour week will relieve textiles, and use of war prisoners will ease lumber work. Even Florida's lack of labor has not let up, despite waning of the boom tourist season. However, some spots—as Chattanooga and Nashville, Tenn.—have labor surpluses.

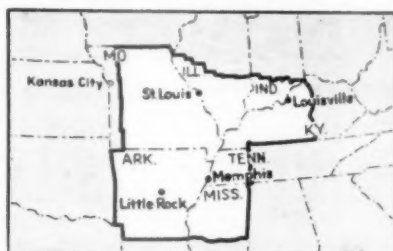
OK-A GUIDE TO INCOME TRENDS

...ns delay spring plantings, but augur bumper yields if weather runs well from now on. Arms shifts hurt some
...cts, help others—a hint of changes possible after invasion. Reconversion and postwar hopes also press forward.



Chicago-Detroit's and Milwaukee's em-
ment have risen recently, but declines
...ue in most other war centers—Indian-
...s, Des Moines, Rock Island-Davenport-
...ne, as well as this city—occasionally be-
...e of cutbacks, but primarily because of
... and other shortages. Flurries of strikes
... dozen sizable ones recently—reflect and
...vate manpower troubles. Springfield
...ust run a recruitment campaign, and
... deficit may run to 30,000 here soon.
... women already number one-third of
... plant workers.

...cess rainfall has delayed planting, but
...s laid a fine subsoil foundation for corn
... as last year. The thing is now to get
... warm sun in time. In any case, re-
...ts have been high all spring, what with
... heavy runs of livestock; feed crops will
...amine how many animals can be kept
... 1945 marketing—and profits—and how
... must be sold off before.



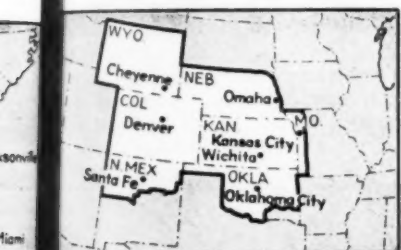
• St. Louis—Recent weather has hit farm
prospects hard. Again this year, floods have
struck through both northern and southern
sections of the district; damage can't yet
be fully assessed. In addition, recent cold
and rain have delayed plantings, held back
crop growth, and hurt peaches and straw-
berries. So the recovery from 1943's
weather-hit farm receipts may not be sharp.

Meantime, payrolls may go on down. Un-
like such districts as Cleveland, which bene-
fits from changeovers in ordnance programs
from bullets to shells, this region has got
few new contracts. Louisville remains the
only big area with tight labor supply. How-
ever, the major cutbacks in and about this
city have caused little hardship so far, al-
though payrolls fell; most released workers
were women who retired, and others took
unskilled jobs. And labor "surpluses" in
such towns as Memphis consist of persons
from nearby farms and of younger women.



• Twin Cities—In contrast to other sections,
chief worry here has been lack of rain dur-
ing spring planting, now nearly completed.
Recent rains have improved prospects a bit,
except in South Dakota. This year's plant-
ing emphasis is on feed crops, rather than
on less familiar soybean and flax crops. The
spring run of livestock to market is nearly
over; losses were few. Income from the new
wool crop will depend on strength of gov-
ernment price supports. Meanwhile, Dakota
farmers have been using their record incomes
to clean up debts and to buy new land out-
right.

Except in shipbuilding, war work is still
tapering off. Locally, toolmakers and
foundry workers are scarce, but there is a
general labor surplus. This heightens hopes
for head-start reconversion, and has attracted
some firms from labor-short areas. Ore-ship-
ping on the Lakes is not straining for new
records as last year.



Kansas City—Farmers here are wondering
they have been getting too much of a good
thing. Rains earlier broke the winter
drought, but recent heavy moisture, while
improving winter wheat, pasturage, and sub-
sistence crops, has caused floods, delayed sowings, and
many fields under water. If sun comes
in time, it will convert the moisture into
corn and other autumn yields. All in
the crop year is not apt to turn out ex-
ceptionally, either way, in view of recent
weather conditions.

No major arms developments are under
way, with most centers close to expected
levels. Outstanding exception is the engine
plant in this city, which is still hiring heav-
ily. On the other hand, some 15,000 work-
ers released by cutbacks in the Denver area
have been easily absorbed by other lines.
Other sections are still chalking up sharper
gains over last year in income payments than
the national average.



• Dallas—Last month's good weather spurred
cotton planting just about to completion.
However, the delay impairs prospects, par-
ticularly because late crops are more sus-
ceptible to boll weevil damage. In the
lower Rio Grande Valley, vegetable prices
have slumped from winter highs. And in
southwest Texas, some spring-sheared sheep
will hold over until autumn, because ware-
houses are already full of wool. Panhandle
wheat hasn't turned out well, and corn
couldn't be seeded as early as necessary, so
grain sorghums this year will take up over
six million acres—a new record.

Almost 300,000 workers have been moved
into war jobs that did not exist years ago
without creating proportionately as many
labor shortage areas as elsewhere. And ex-
isting shortages are easing. True, there are
tight areas—e.g., around Beaumont, where
the town of Orange is up from 7,000 to
50,000 population.



• San Francisco—Aircraft and shipbuilding
still dominate industrial developments on
the West Coast, and changes in these lines
are primary in determining income. Thus,
in some spots efficiency has increased
faster than contracts, and employment has
dropped; also, Seattle plants are changing
over from Fortresses to Superfortresses, and
Los Angeles workers from light bombers to
other types. But also important of late is
the high level of lumber output that has
been sustained, heavy oil output, and the
gradual development of a chemical industry
based solidly on fundamental regional raw
materials—wood, oil, grains, minerals, and
power.

This year's excellent fruit crop has been
hurt by recent weather—how much as yet
can't be said. And rains came too late for
grass for spring lambs. But basically, the
farm prospect is good—and citrus income is
a way up from 1943.

EXECUTIVE

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LABOR

White-Collar Aid

Senate group's report on relief for certain lower income workers may not give a practical plan, but it will help NWLB.

A pre-election present to the nation's white-collar workers may be wrapped up in a report by a Senate labor subcommittee headed by Sen. Claude Pepper. The report asked the National War Labor Board to remove all wage controls from the heads of families earning less than \$200 a month and unmarried persons earning less than \$150 a month. ● **A Way Out**—Although NWLB officials do not regard the report's specific proposal as practical (you cannot pay workers different scales for doing identical work just because one's married and one's not), observers agreed that the report would make it possible for the board to do something for the lower income groups without selling out the stabilization program.

OPA, which is bitterly opposed to any over-all lifting of the Little Steel formula, has always favored giving a break to the lower income groups, provided that existing controls over middle and higher incomes would be left unchanged.

● **Possible Effects**—The possibility exists that NWLB might cut the ground from under the whole labor fight against present wage policies by agreeing to a modification designed to help the lower

income groups. One such modification would be to substitute a flat adjustment—say 15¢ an hour—for the Little Steel percentage formula up to a certain income point.

The Pepper report also was designed to help the Administration obtain renewal of the price control act and the OPA's appropriation through Congress for another fiscal year. It asked for more rigid price control and funds for price enforcement.

● **Aid for Public Employees**—NWLB was asked to provide both employers and employees with "easily understood" explanations of its policies and rules.

State, county, and municipal governments were urged to grant increases to their low-paid workers, with higher income tax exemptions to these workers from the federal government suggested as an alternative.

Recommendations of the Social Security Board that public assistance benefits be increased were endorsed to aid those dependent on such benefits.

● **Funds for Cost Studies**—Funds for the U. S. Bureau of Labor Statistics to enable it to make separate studies of wartime factors affecting its cost-of-living index also were asked.

The committee said that spokesmen for organized labor and the BLS agreed that income of as much as \$50 a week provides a "very narrow margin of living."

This view was reflected in the main recommendation. An income of \$20 a month would amount to about \$1.66 an hour, assuming a 40-hour week.

What's Happening to the Cost of Living

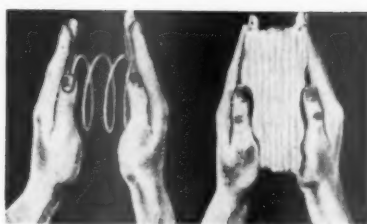
	Food	Clothing	Rent	Fuel, Ice, & Electricity	House Furnishings	Misc.	Total Cost of Living
August, 1939	93.5	100.3	104.3	97.5	100.6	100.4	98.6
January, 1941*	97.8	100.7	105.0	100.8	100.1	101.9	100.8
March	98.4	102.1	105.1	100.7	101.6	101.9	101.2
March, 1942	118.6	123.6	108.9	104.5	121.2	110.1	114.3
March, 1943	137.4	127.6	108.0	107.4	124.5	114.5	122.8
April	140.6	127.9	108.0	107.5	124.8	114.9	124.1
May	143.0	127.9	108.0	107.6	125.1	115.3	125.1
June	141.9	127.9	108.0	107.7	125.4	115.7	124.8
July	139.0	129.1	108.0	107.6	125.6	116.1	123.9
August	137.2	129.6	108.0	107.6	125.9	116.5	123.4
September	137.4	132.5	108.0	107.6	126.3	117.0	123.9
October	138.2	133.3	108.0	107.8	126.7	117.6	124.4
November	137.3	133.5	108.0	107.9	126.9	117.7	124.2
December	137.1	134.6	108.1	109.4	127.9	118.1	124.4
January, 1944	136.1	134.7	108.1	109.5	128.3	118.4	124.2
February	134.5	135.2	108.1	110.3	128.7	118.7	123.8
March	134.1	136.7	108.1	109.9	129.0	119.1	123.8

Data: U. S. Bureau of Labor Statistics; 1935-39 = 100.

* Base month of NWLB's "Little Steel" formula.



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This unusual glass—Fiberglas*—is soft, pliant. Threads of Fiberglas are woven into fabrics having many uses. Or, other fibers are formed into a soft, wool-like mass and used as insulation against heat. Or, it is felted, compressed, and formed into pipe coverings and insulating boards.

Always Adds Unique Extras

Fiberglas can be used in a thousand places where glass has never been used before! It does the specific job of other materials . . . and then adds the unique advantages of glass!

Glass, in fiber form, has great tensile strength. It's

springy. It can't burn, rot, mildew. It won't pick up moisture or odors from the air. It resists most acids. Moths, termites, rats, vermin won't eat it. And it gives these extra advantages wherever it is used.

No wonder dozens of industries are already using 117 forms of Fiberglas . . . both in war and civilian goods!

This page pictures some ways that the "wool" form of Fiberglas protects you, or medical supplies, or food for fighters, from heat or cold. For more information about Fiberglas, write for free booklet, "Fiberglas, a New Basic Material."

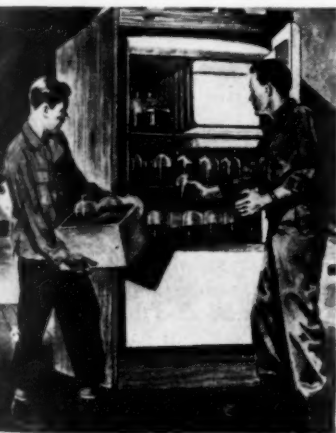
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FIBERGLAS

T. M. Reg., U. S. Pat. Off.



Insulated food containers in this truck bring hot meals to troops in a forward area. Rough roads and rough handling shake up the containers. Yet they remain efficient, because Fiberglas insulation is springy—does not settle under vibration.



Army uses domestic refrigerator for blood bank in evacuation hospital. Fiberglas insulation helps keep blood at correct low temperature under extreme conditions of heat, rain, and knocking about . . . Fiberglas will not rot, mildew, or support fungus growth.



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Rauland

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Petrillo Cornered

Musicians' czar ordered by NWLB to halt strikes at radio stations in Midwest. Attorney hints at "legal" strike.

James C. Petrillo was told off by the National War Labor Board this week. Through his counsel, Joseph A. Padway, the president of the A.F.L. American Federation of Musicians was instructed to terminate immediately the strikes of phonograph record turners in progress at radio stations WJJD, Chicago, and KSTP, Minneapolis.

• **Another Strike?**—Compliance was not immediate. NWLB had Padway's advance assurance, however, that the union would obey any order from the board. Padway warned that the union would file 30 days' notice of intent to strike, in conformity with the War Labor Disputes Act, in the event of an adverse decision.

The A.F.M. was hauled on the carpet last Monday to show cause why strikes of record turners at the two radio stations had not been ended in accordance with previous NWLB instructions and why the local unions involved should not be penalized. In its unanimous decision, the board made short work of Padway's contention that the strikes had no effect on the war program.

William Green, president of the American Federation of Labor, had declared the strikes to be violations of A.F.L.'s no-strike pledge, and had promised station owners to exercise all efforts to achieve a settlement. He has no jurisdiction over the disputes, however.

This is the first time Green has taken exception to Petrillo's technique. Green retains his eligibility for A.F.L. office by virtue of a technical membership given him in the musicians union after his ouster from the United Mine Workers, the union which led the C.I.O. defection from the A.F.L.

• **Bigger Staff**—The WJJD strike began Apr. 13 when the station's ten "pancake turners" (men who put transcriptions on the turntables and take them off) walked out because the station refused to add ten more to its staff. There was no dispute over hours, wages, or working conditions. Salaries range from \$75 to \$105 for a 25-hour, five-day work-week.

Petrillo explained that the musicians were withdrawing the "concession" (smaller staff) WJJD previously had enjoyed, because now it is an established success as an independent station.

Ralph Atlass, WJJD president, asserted that uniform wage scales are es-

red
ered by
t radio
ttorney

ished only for network jobs—highest
in the business—and that wage
for all other musicians, whether
ater, night club, or independent
station, are negotiated individ-
with the employer. While the
ter jockeys are on strike, four girl
ical workers are turning the tran-
ptions in their spare time.

for More Musicians—The walkout at
TP occurred after the station agreed
the union's wage demands, subject
NWLB approval, but refused to add
et men to its staff of musicians.
sicians in the station's St. Paul
dio refused to follow strike orders
in the union.

In addition to asking the stations to
e more men, Petrillo is seeking as-
sance that pancake turners will not
ble for live talent on any occasion.
Petrillo has a bigger issue at stake
ore NWLB. That is his demand
at the big recording subsidiaries of
Radio Corp. of America and the
olumbia Broadcasting System pay into
e unemployment fund of the union
royalty on each musical recording that
made. A panel of NWLB recom-
ended rejection of the demand (BW-
ar.18'44,p107).

Ken-Rad Fights

Radio tube firm seeks an
unction to end Army operation
plants. NWLB wage order is
rmed unlawful.

The Ken-Rad Tube & Lamp Corp. is
aking legal holes in the proceedings
uch culminated in seizure of its radio
be plant at Owensboro, Ky., and op-
ation of the facilities by the Army
(W-Apr.29'44,p5).

In a petition to the U. S. District
ourt at Louisville for an injunction,
m-Rad sought to arrest the takeover
er and block the payment of a wage
crease to its employees as directed by
resident Roosevelt.

Balked at Increase—Ken-Rad locked
rms with the National War Labor
ard because of an order in July, 1943,
increase wages 3¢ an hour and to
ublish a minimum wage of 50¢ an
our after a brief learning period. These
visions were to be retroactive to
pt. 4, 1942.

The company's refusal to comply re-
lted in seizure of the two Owensboro
ants (other Ken-Rad facilities in Ken-
cky and Indiana are not involved in
e Owensboro dispute).

Beyond the Formula—Ken-Rad's in-
ction petition described the NWLB
der as unlawful in that it called for

Famous "Water Buffaloes"

are made in
**SANTA CLARA
COUNTY!**



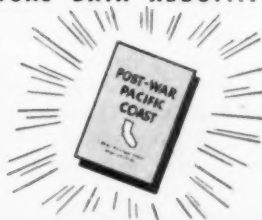
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DEPT. W SAN JOSE CHAMBER OF COMMERCE, SAN JOSE, 23, CALIFORNIA

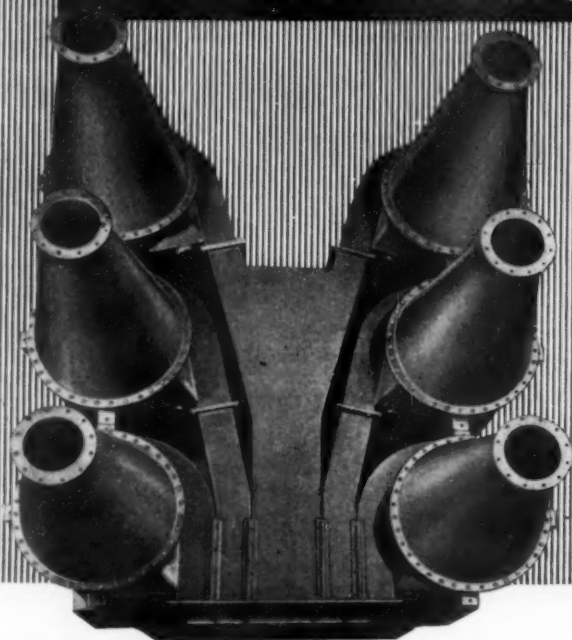


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DESIGNED TO DO A JOB, NOT JUST TO MEET A "SPEC"

increases in wage rates which were ready in excess of the limits imposed by the Little Steel formula. Roy B. Lew, president of Ken-Rad, asserted the petition that wage levels are 17% higher than they were in January, 1946 (the Little Steel formula permits 15%) and that the debated increase would push them up to 30% in contradiction of the President's hold-the-line order.

The board's position is that the order was entirely within the discretionary powers it possesses to adjust substantial wage rates without regard for the Little Steel formula.

• **Army Told to Pay**—In his instructions to the War Dept., President Roosevelt specified that the retroactive wage increase be paid, by the Army management out of current income, and this is the focal point of Ken-Rad's legal attack.

Although the two Owensboro plants employ only about 3,200 production and maintenance workers, officials of the A.F.L. United Automobile Workers, the employees' bargaining agency, estimated that about 9,000 persons would share in the distribution of back pay. This includes more than 5,000 persons no longer associated with Ken-Rad.

BRIDGES-BECK FEUD BOILS

Harry Bridges and Dave Beck are at it again. This time the rivalry between the two Pacific Coast labor czars is holding up the movement of lend-lease supplies for Russia at a warehouse in Portland, Ore.

Until recently the warehouse was operated under government contract by the Jones Terminal Co., whose employees are members of Bridges' C.I.O. International Longshoremen's & Warehousemen's Union.

But when the supervision contract expired and new bids were asked, Jones was underbid by Hector M. Hunt Co., which has a contract with a warehousemen's local of Beck's A.F.L. Teamsters.

To prevent operation of the project under A.F.L. contract, the Bridges forces picketed the warehouse and brought all activities in the building to a standstill. This was an ironic touch considering that the pickets who blocked shipment of relief supplies to communist Russia were followers of Bridges whose alleged communist activities have been under fire for years (BW-Mar. 18'44, p80).

The Treasury Dept. has taken over the warehouse in hope of freeing the war-relief goods, but trouble persists. At the civil service rates, it is able to pay (about \$1.08 an hour as against \$1.10 paid by civilian operators), the Treasury can't get enough men to carry on.

Foremen Strike

Briggs, Hudson, Murray
Supervisors process grievances
walking out. They're still
fighting for union recognition.

Refusal of management to extend col-
lective bargaining recognition to super-
visory personnel, and failure of the
National Labor Relations Board to de-
cide whether supervisors are employers
employees (BW—Feb. 26 '44, p104),
behind the crippling walkouts of
foremen in Detroit this week.

Grievance Setup—Identical reasons
given by the unaffiliated Foreman's
Union of America for the unrelated
attacks at Briggs Mfg. Co., Murray Corp.
America, and Hudson Motor Car Co.
lack of grievance machinery to process
complaints.

The Briggs trouble broke out in the
company's Conner Ave. plant where,
the strikers, personnel cuts among
production workers made it impossible
to meet production schedules, and thus
reflected on their records as foremen.

Officially Aloof—Although the C.I.O.
United Auto Workers, which bargains
Briggs production workers, main-
tains an official policy of aloofness,
sympathies of rank-and-file mem-
bers were shown by a two-hour sitdown
of 6,000 workers at the Conner
plant on Monday in protest against the
absence of nonstriking foremen.

In other Briggs plants, production was
reduced as much as 50%, and the company
admitted some would have to be closed
because of lack of supervision.

Foremen Transferred—Hudson Motor
Car foremen in three plants left their
posts Monday. Their complaint was
that a foreman with 13 years' seniority
was removed from his post without
warning. Hudson declared that he had
been transferred to another job at the
same rate of pay.

As in the Briggs case, the grievance
union gave the foremen's union an opportunity
to dramatize its lack of recognition.

The fever spread to the Murray Corp.
plant on Wednesday when 350 foremen
quit their jobs claiming that six foremen
had been discharged for union activity
charge denied by the company.

Policy Under Fire—NLRB policy,
announced in the Maryland Drydock
decision (BW—May 15 '43, p8), is that
foremen do not constitute a unit appro-
priate for bargaining purposes. But the
products of this policy have drawn
such fierce objection from the F.A.A.
that the board two months ago held a
public session to hear the pros and
cons. No decision has been announced.



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POWELL VALVES

M. of M. Stands

Industry dissent in Humble Oil decision is toned down, and membership-maintenance order survives NWLB squabble.

Regional war labor boards in effect were told bluntly to "go along" with the National War Labor Board's maintenance-of-membership policy when the board overruled its Dallas regional board to order union members employed by the Humble Oil & Refining Co., Ingleside, Tex., to maintain their membership in good standing during the life of their contract (BW—Apr. 29 '44, p107).

This fact, plus the shortened tempers within the board over the Montgomery Ward unpleasantness (page 17), may explain the bitter industry dissent which threatened to split the board open.

• **Local Settlement**—On this point, the industry dissent said:

"Regional boards were established, among other reasons, in order that local disputes might be settled locally, and particularly in the light of the circumstances and the conditions prevailing locally. This was advanced as a sound theory of democratic administration, a theory that was supported unanimously

by the entire membership of board."

The general objection to the maintenance rule was:

"We assert that the philosophy pounded by the majority leads inevitably to denial of the very ideals which our country is fighting the present war. We condemn the majority proposed policy on union maintenance because, in our opinion, its application contemplates widespread undermining restriction of the rights of workers of employers; because it would spread more or less indiscriminately in industry a device unproved as an aid to production; and because it would constitute a potent threat to harmonious industrial relations so necessary now and the postwar period."

• **Opinion Toned Down**—Significant the opinion failed to state that the industry members considered the policy "unlawful." An earlier draft of opinion—which was prepared by an alternate industry member, James T. Tanham—charged that the board majority was trying to evade a court test of "unlawful" policy.

Board Chairman William H. Davis objected violently to the suggestion. At great length, public members lectured Tanham on the history of maintenance of membership, explained that the board did not want court review of a decision because labor relations do not



FREE FOR VETERANS

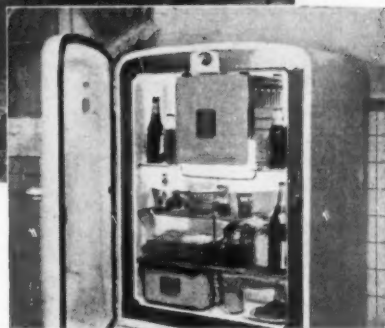
Paralleling industry's campaigns to re-employ discharged war veterans is organized labor's drive to swell its ranks with them. The chief inducement now offered by several unions is

the waiver of initiation fees for returned warriors. At Portland, Ore., A.F.L. Machinists' Local No. 63 adds a free set of tools (BW—Apr. 29 '44, p46) which Henry J. Detloff, financial secretary, is passing over to Sgt. A. B. Quackenbusch, a two-war veteran.

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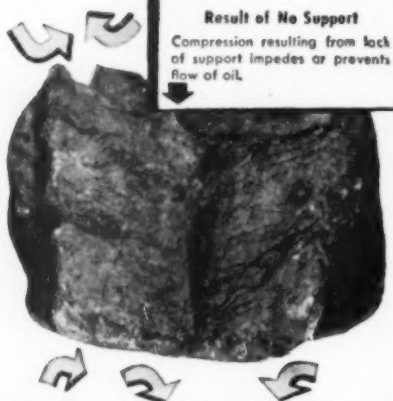
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wait for the courts, added that ample legal precedents to justify the policy existed.

On the subject of court review, the final draft said:

"Because of the frequent challenge, by learned counsel, of the board's authority to impose its form of maintenance of membership, we would welcome a judicial determination of that question."

WAGE DODGE PUNISHED

Two tool and die companies in Ohio last week were found by the Cleveland Regional War Labor Board to have set up separate corporations in an effort to legalize payments of wages beyond the limits permitted by the wage stabilization program.

The Schnell Tool & Die Co. and United Tool & Die Co., Salem, Ohio, after making their employees "partners" in the firms, paid them from 25¢ to \$1 more per hour than the \$1.20 going rate for tool and die makers in that area.

The board held that both employers had full knowledge of the wage stabilization law and that their method of operation was, therefore, a deliberate evasion. An examination of the articles of incorporation of each firm showed that all essential powers were retained by one individual in each company.

The board fixed \$15,000 as the amount which will be disregarded in computing Schnell's costs for income tax purposes or as expenses under any other laws; and \$2,500 against the United Tool & Die Co.

FORD UNION OUT AGAIN

Settlement last week end of a strike at the Windsor (Ont.) plant of Ford Motor Co. of Canada, Ltd., provided that the bargaining contract, abrogated by the company at the start of the walk-out, be reinstated. But it was a fleeting peace, for the strike broke out again.

The company's cancellation of the agreement with its C.I.O. United Auto Workers local (BW-Apr.29'44.p98) had made the strike an object of attention on both sides of the boundary.

Terms of settlement were reached in negotiations at Ottawa. The settlement, a clear-cut victory for the union, not only reinstated the contract, but also called for rehiring of four shop stewards whose discharges directly precipitated the walkout.

Disputes over methods of handling grievances were to be settled in forthcoming negotiations.

The windup of the strike sent 14,000 workers back to their jobs Monday. But they went out again on Wednesday, still dissatisfied with the grievance procedure.

TOBIN BITES BACK

When it comes to knocking down an employer's cars for tactics inconsistent with the intentions of his own A.F.L. International Brotherhood of Teamsters Daniel J. Tobin has few peers.

Last week, the president of the teamsters demonstrated how he comports himself on the other side of the collective bargaining equation.

The International Mailers Union, footloose since its parent Typographical Union pulled out of the A.F.L., called a strike which tied up movement of 450,000 copies of the International Teamster, Tobin's magazine, because Tobin wouldn't recognize the mailers as bargaining agents for twelve girls employed in his Indianapolis office.

Tobin reacted violently. He suspended the magazine and fired eleven of the twelve girls. Next day he reconsidered, however, and rehired the girls. But he still withheld recognition, claiming that the A.F.L. Stenographers Union also wants to speak for the girls. The mailers petitioned the National Labor Relations Board three months ago for an election. NLRB is to tackle the issue next week.

HUGHES FIGHTS NWLB ORDER

The Hughes Tool Co. of Houston, Tex., has filed suit in U. S. District Court, Washington, D. C., against National War Labor Board and Economic Stabilization Director Fred Vinson to prevent enforcement of a maintenance-of-membership order.

The company's contract with C.I.O. United Steelworkers of America expired Apr. 6 and has not been renewed. Hughes contends that the NWLB order is void and that enforcement of the maintenance clause involves impossibilities as several hundred workers have withdrawn from the C.I.O. during the past few months and dues are in arrears.

The 6,000 Hughes workers have been divided since 1940 between the Independent Metal Workers Union, which held the first union contract, and the C.I.O. union, which obtained the bargaining rights in December, 1942.

Hughes has launched an expansion program and plans to spend \$1,700,000 on new building and \$1,800,000 for new equipment in preparation for a resumption of production of oil field tools.

C.I.O. Wins Point

Interim labor relations retains seniority ratings for all telegraphers in merger of Western Union and Postal.

The National War Labor Board is trying to unsnarl the tangled labor problems stemming from last fall's merger of Western Union Telegraph Co. and Postal Telegraph Corp. (BW—Nov. 15, p. 96).

Unions—C.I.O.'s American Communications Assn. had a union at Postal, but Western Union employees were represented in collective bargaining by 21 different A.F.L. unions and some independents. Maintenance of the status quo would mean disparate hours, and working conditions for employees doing identical work.

To figure out an interim plan until the National Labor Relations Board can determine the proper collective bargaining agent, or agents, NWLB assigned Arthur S. Meyer, public member, to hold hearings of union and company representatives.

Rates Equalized—Meyer last week recommended (1) seniority ratings based on years of service in either company, and (2) jobs for all employees comparable to those held before the merger.

He also recommended that the company be permitted to cut the hours and consequently the weekly pay of Postal workers making more than comparable Western Union employees, subject to provisions of the A.C.A. contract.

First Round—If carried into effect, Meyer's report gives the first round to C.I.O., since the A.F.L. unions contended that Postal workers should be considered new employees, without seniority or job privileges. In January, NWLB ordered the company to extend the A.C.A. contract pending final settlement.

The NLRB election has been held due to technicalities incident to conducting a nationwide poll among 70,000 workers.

CORRECTION

Through a typographical error appearing in some early copies of the Apr. 29 issue of Business Week, a caption on a photograph of Paul Shoup, president of the Los Angeles Merchants & Manufacturers Assn., referred to Mr. Shoup as an "open-shop opponent." As corrected in later issues and as made clear in the accompanying news-report in any subsequent issue, the phrase is "open-shop proponent."

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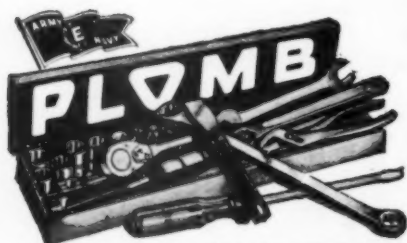


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FINE HAND TOOLS FOR ALL INDUSTRIES

New Pay Idea

"Guide" rates planned to handle inequalities in the lumber industry. West Coast commission survives attack in NWLB.

Although Pacific Coast lumber interests wanted to scrap it, the National War Labor Board has ordered its West Coast Lumber Commission continued with the proviso that it establish "guide" rates to handle "inequalities" within a particular plant or operation.

• **Counterproposal**—Industry members of the board objected to continuation of the commission, which was set up by the board to handle wage disputes in the West Coast lumber areas (BW—Jan.30'43,p80). Instead, the industry members proposed that the lumber job be turned over to West Coast regional war labor boards, but joined with labor and public members to indorse the new guide rate idea.

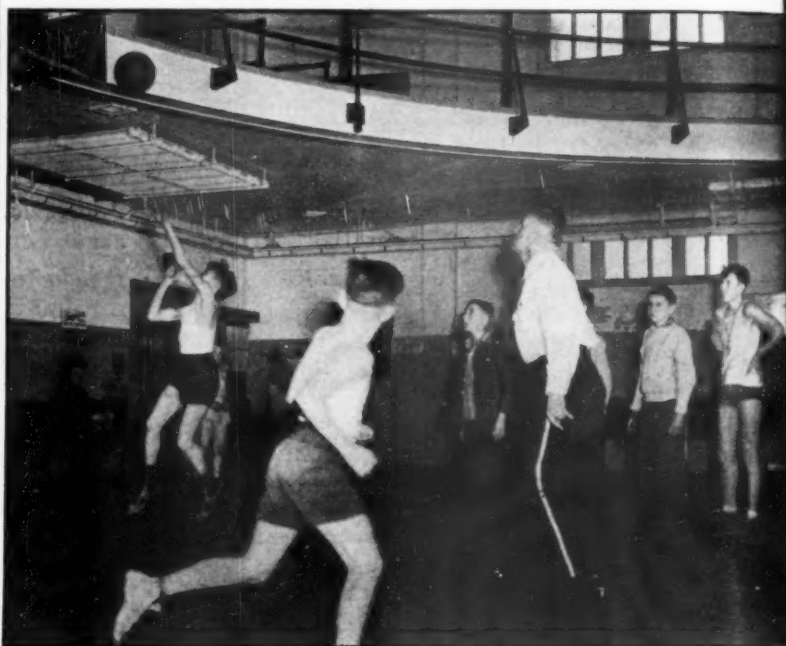
In the hands of regional boards, fewer wage increases presumably would be granted since the boards would be more concerned about the possible effect of wage boosts on other rates in the area and would hold the lid on.

The guide rates may be set up for specific jobs throughout the industry or for specific areas of the industry to provide some uniformity on job reclassification rulings. Where the content of specific jobs varies substantially from plant to plant, the board ordered the commission to break the jobs into specific classifications.

In addition to using the new guide the commission was directed to consider: (1) relationships among job classification rates in the West Coast lumber industry; (2) historical relationships among the wage rates of jobs of the company involved; (3) nature of work performed by employees in individual job classifications; and (4) other relevant subordinate factors.

• **Wage Plea Is Pending**—Still unannounced is a board decision on demands of 60,000 A.F.L. and C.I.O. lumber workers in Oregon, Washington, Idaho, Montana, and California for a wage increase (BW—Apr.1'44,p88). The lumber commission discussed the matter with the parent board, and then the board decided it needed more information from War Production Board and War Manpower Commission officials.

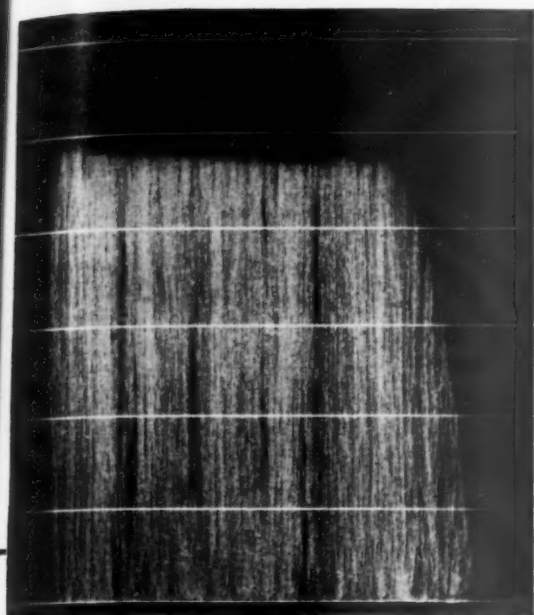
NWLB is reported dissatisfied with testimony given by these two government agencies at a hearing in Portland in February. The new testimony was



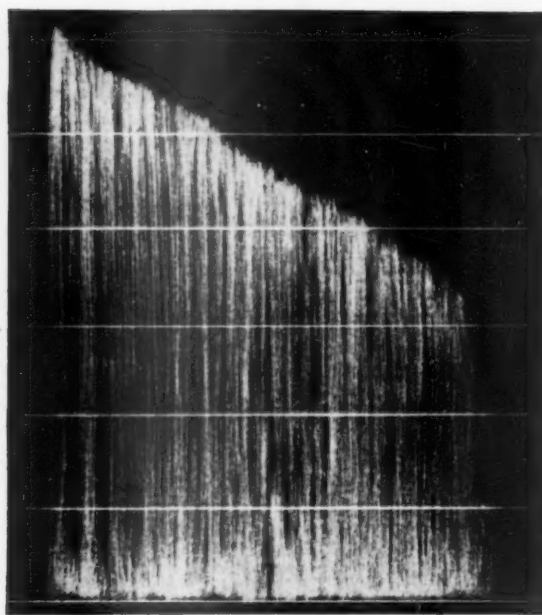
PLAY AIDS PRODUCTION

War-working parents who can provide their children with supervised recreation possess fewer psychological drawbacks to production because fears of juvenile delinquency are lightened.

For this reason, the employees club at Cessna Aircraft, Wichita, Kan., relinquishes its gymnasium to school-age boys on Saturdays. Thus more than 100 youngsters are permitted a full program of indoor sports—under the eyes of a professional coach.



This is the way a sample of standard rayon staple looks, with fibers combed out and laid parallel. Notice the nearly perfect uniformity of length, desirable in most uses.



Here is a sample of the new "varied length" rayon staple showing distribution of long and short fibers. The new process permits control to fit the varied lengths typical of wool.

The long and the short of a new Rayon development

YOU WOULD EXPECT the normal result of a technological improvement to be controlled uniformity. But here in a case where the direct opposite, controlled *non-uniformity*, was the aim of American Viscose Corporation research. And why? The answer lies in the new rayon-and-wool blended fabrics now appearing on the market.

Rayon is particularly adapted to blending with wool to create fabrics with many distinct advantages. However, to combine it with wool... *uneven* (or varied) lengths of rayon staple fibers are desirable so that they will more thoroughly blend with the *uneven* lengths of natural wool fibers.

Sounds simple doesn't it? But the solution had to provide a fast, practical and low-cost means of achieving this *controlled non-uniformity*... in pound after pound of precision-made rayon staple, each pound containing more than five million fibers!

First, a special process to achieve this had to be developed in American Viscose Corporation's laboratories. Then, special machinery had to be designed to make the development commercially practicable.

Today a more even and intimate blend of the natural and man-made fibers is assured... additional beauty, better texture are provided in the finished cloth. And furthermore, the process shows some reduction in waste, with a corresponding increase in production efficiency.

You may not be able to notice any startling improvement in rayon-and-wool fabrics as a result of this development. It is just one of the many technical advances in textile manufacture that can be directly traced to the continuous research program of American Viscose Corporation. Taken together, these small improvements add up to better fabrics of higher intrinsic value... designed to satisfy the needs and wants of America's consumers.

AMERICAN VISCOSE CORPORATION

Producer of CROWN® Rayon Yarns and Staple Fibers

Sales Offices: 350 Fifth Avenue, New York 1; Providence, R. I.; Charlotte, N. C.; Philadelphia, Pa.

Plants at: Marcus Hook, Pa.; Roanoke, Va.; Parkersburg, W. Va.; Lewistown, Pa.; Meadville, Pa.; Nitro, W. Va.; Front Royal, Va.

★ BUY UNITED STATES WAR BONDS AND STAMPS ★



*A better way
to buy
Rayon Fabrics*

This identification is awarded only to fabrics containing CROWN rayon, after they have passed the CROWN Tests for serviceability.

Wanted: Outstanding EXECUTIVE-SALESMAN TO HEAD

INDUSTRIAL PROMOTION WORK

Rare opportunity for mature, top-notch sales-minded executive, with initiative. Do you possess broad experience in dealing with major executive of America's leading manufacturing concerns? Have you sound knowledge of markets, distribution, business trends, factory location problems? Are you able to prepare and "sell" convincing factual reports and surveys. If so, a very impressive present and postwar future await you with large, successful Pacific Coast organization. Write fully.

P-384, Business Week
230 W. 42nd St., New York 18, N. Y.



AN APOLOGY

There will be no booklet announcing the Eighth Annual Work Simplification Conferences this year, because:

1. The number of applications already far exceeds the number of delegates we can accept for the 1944 Conferences.
2. I have left the Continental United States on a special project for the War Department, but will return in time for the Conferences.

The Conferences, held each year at Lake Placid Club, New York, under the auspices of the Lake Placid Club Education Foundation, go back to the six-week program, and the staff, composed of outstanding leaders in the field of management education and application, will be considerably enlarged. For the past two years I have devoted most of my own time to the Work Simplification Program at Lockheed Aircraft Corporation, where we have had an opportunity to train 7000 supervisors. This is the largest single program ever attempted, and it has been so successful that those attending the 1944 Conferences will benefit greatly by the accelerated experience thus gained.

★

If you wish to be included in the 1945 Conferences, may I suggest that you make a tentative reservation now. A few of the 1943 folders are still available, if you are not familiar with the Conferences. Write:

ALLAN H. MOGENSEN

Work Simplification Conferences
330 W. 42nd St., New York 18, N. Y.

come from officials in Washington. It will be gathered by a board panel headed by Dr. Dexter M. Keezer, public member of the board.

• **Leaves Door Open**—After denying a wage increase early in the year, the commission left the door open with certifications from the WPB and WMC. The WPB certified the critical need of lumber, and WMC attested to the dearth of workmen.

The A.F.L. seeks to raise minimum hourly wages from 90¢ to \$1.05 and the C.I.O. to \$1.02½ for workers in the fir and pine industry.

• **Higher Average**—Operators insist a wage increase will not coax workers back to the industry from shipyards and other war industries, despite the fact that the average in both sawmills and woods is much higher than the hourly minimum. The average is higher in the woods, in fact, than the \$1.20 hourly in war industries. Straight-time average in sawmills is \$1.15 and \$1.35 in woods.

STATION AGENTS COLLECT

A judgment of \$80,700 has been entered for the Order of Railroad Telegraphers by a federal district court in Georgia in a case against the Railway Express Agency, Inc., which dates back to 1937 and involves claims going back as far as 1917.

The union claimed that compensation of individual agents at stations of the Seaboard Air Line Railway had been reduced in contravention of an agreement signed Aug. 1, 1917, and that these reductions were illegal, despite the fact that, in many cases, the individual agents concerned had agreed to them. The types of compensation in question were commission rates on car-load express shipments, guaranteed minimum commissions of \$10 a month, and transfer allowances.

On Dec. 15, 1937, an award by the National Railroad Adjustment Board upheld the union in this claim, and the union promptly filed suit for back payment. The case was carried all the way to the U. S. Supreme Court, which ruled that the NRAB's award was "proper and valid," and returned the case to the district court for final disposition.

DETROIT PLAN FOR 4-F'S

The management-labor committee of the Detroit area War Manpower Commission is considering a plan for controlled referral into war jobs of men classified 4-F by Selective Service.

No action has yet been taken, but WMC is highly interested in figures showing that 133,000 Michigan men between 18 and 38 are classified 4-F, and 40% of those are in the labor-tight



BOTTLENECK FREED

An expert tinplate pickler at Inland Steel's Indiana Harbor works, Dan Pink, was jailed recently in Chicago for allegedly falling \$248 behind in alimony payments. Plate products skidded, so he was released eight days later when the company went to court and agreed to pay off his arrearages.

Detroit area. No figures are available showing how many of the 133,000 have gone into essential activities.

The proposal being considered by WMC would require men classified 4-F to go to the United States Employment Service for channeling into war plants. Edward L. Cushman, Detroit WMC director, said that the powers inherent in his office made it possible to speed such procedure.

JOB FAKERS CURBED

The War Manpower Commission has clamped down on workers who provoke their employers into discharging them so that they can take higher-paying jobs elsewhere (BW—Mar. 18, 44, p. 5). Henceforth, they will not obtain certificates of availability for 60 days.

To cut down on war worker turnover, WMC last summer ruled that any employee leaving his job must wait 60 days before being eligible for other work. The rule did not apply to discharged employees. Thus when a worker wanted to change to a better job, he could provoke his boss into firing him and so get around the 60-day wait.

The new ruling is that if an investigation shows that the employee is laid off through no wish of his own, he will be eligible for an immediate certificate of availability.

THE WAR AND BUSINESS ABROAD

BUSINESS WEEK

JUNE 6, 1944



INVASION

SPECIAL REPORT

It's time for business to make a quick check on D-Day developments and on what can be expected with the invasion that we now await as the prelude to victory.

While D-Day is still shrouded in secrecy, there will be no doubt when it arrives. Even the stepped-up air pounding isn't the real thing.

Fortress Europe will be attacked simultaneously from east, south, west.

Bombing will climb swiftly to several times the weight of anything known so far—may even top 20,000 tons in the first 24 hours (compared with this week's record daily average of 3,000 to 5,000 tons).

Masses of Allied paratroopers will be dropped inside Hitler's shoreline defenses. Glider planes will land light, swift tanks, heavy artillery, armored cars and jeeps.

First objectives will be enemy airfields.

Agents have already filtered into Holland, Belgium, and France, and are prepared to mobilize the underground immediately the signal is given from Britain. Picked men already know their roles in demoralizing enemy communications, wrecking power plants, leading the invading paratroopers to their objectives.

Directions to the undergrounds all over Europe will be beamed over ABSIE (American Broadcasting Service in Europe), the new British Isles American station which went into service only last Sunday, and over Britain's BBC.

Scheme of the Allies and of Russia is to reverse the blitz by which Hitler—four years ago—overran Holland, Belgium, and France in less than three months; and—a year later—subdued Yugoslavia and Greece in two months before launching his attack on the Soviet Union, on June 22, 1941.

Nobody knows how long it will take to make sure the invasion is a success.

Some thrusts will succeed more quickly than others.

The French Mediterranean coast may fall to the Allies before a solid foothold is established in the west and north.

The Germans sowed 200,000 mines along the Bay of Biscay coast this week in an effort to thwart a surprise attack in the Bordeaux neighborhood.

The low Danish coasts have been flooded with Nazi reinforcements.

It's likely to require five or six weeks before the real success of the invasion can be measured. But within three months, it should be clear whether or not Axis Europe will be forced to capitulate before the end of 1944.

Don't underestimate the part the Soviet Union is scheduled to play in the forthcoming showdown.

The present lull on the eastern front is part of the Russians' plan. They are massing men and supplies for a drive which will be aimed straight across Poland to Berlin. Hitler is still forced to keep nearly 3,000,000 men on the long Soviet front between Petsamo and the Black Sea.

The Russians will fight the battles of the Balkans, aided mainly by Allied bombing. Moscow doesn't want Allied troops east of the Adriatic, except possibly in Greece.

Here's a checklist of the sources of Germany's strategic materials against

PREINVASION REPORT

BUSINESS WEEK

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which to measure Hitler's economic strength as the invasion progresses:

The loss of **Norway** and the **French coast** (particularly along the Bay of Biscay), of the **Aegean Islands**, and of free access to **Spain** and **Portugal** will decimate the Nazis fish supplies—an important factor on the Axis food front.

Rumania, Bulgaria, and Hungary supply corn, wheat, soybean oil, and animal fodder. Big deliveries of wheat, meat, and fruit have been squeezed out of **France**.

Holland and Denmark still supply butter, cheese, lard, bacon, and eggs, though stocks of cattle and swine have been slashed to less than one-third of prewar levels.

Portugal, Spain, southern France, Italy, and Greece provide all-important supplies of olive oil, citrus fruit, raisins, wine, and cork.

•
Northern Italy and Spain provide **Germany's only mercury supply**, though stocks within Germany are probably large enough to carry war industries for at least a year.

France's vast bauxite supplies (source of aluminum) are along the **Mediterranean, east of Marseille**. Almost as vulnerable is **Hitler's second large source**—along the Adriatic in Italy and Yugoslavia. Closest home are the reserves near Budapest, in Hungary.

•
Europe's only important **uranium** deposit is in Czechoslovakia. Soviet **manganese** is already lost. Without Portuguese and Spanish **tungsten** (partially cut off this week), the Nazis would be dependent on small supplies of substitute metals from Norway, Finland, and Czechoslovakia.

Biggest European **copper** mines are in Spain, Yugoslavia, and Finland. And Hitler's only **nickel** reserve of any size is near Petsamo, Finland.

Both **coal and iron** ore come from France, Belgium, Luxemburg, and Poland. Germany has large supplies of coal—but all of it is located along the vulnerable eastern or western frontiers. Sweden supplies high-grade iron ore for special steels.

Sole natural **oil** supply of any size is the Ploesti field in Rumania. Southern Hungary has replaced Poland as a second supplier of natural oil.

•
Different economic and political policies will be followed in the western Allied countries (Holland, Belgium, France) from the eastern (Greece, Yugoslavia).

Denmark—where the Nazis are revealing invasion jitters—will receive special treatment.

•
Holland, Belgium, and France—through strong spokesmen in their governments-in-exile—demand that the sovereignty and independence of their states be recognized. They refuse to submit to internationalized control.

None of them wants invasion currency. Consequently, invading British and U. S. soldiers are likely to carry special issues of Dutch guilders, Belgian and French francs.

•
None of the western Allied countries wants the United Nations Relief & Rehabilitation Administration to do much.

The French Committee expects that no UNRRA agent will ever turn up in France. **This reflects the widespread (and not to be ignored) distaste among the smaller powers for aggressive leadership by the Big Three.**

•
The committee has presented to the Combined Resources & Production Board

REINVASION REPORT

BUSINESS WEEK

Y 6, 1944

an estimate of French relief needs, and **a delegation is in Washington to ask the board how much goods France may expect to receive.**

The Allied armies, under Gen. Dwight D. Eisenhower, are to distribute relief in the military zones.

Unless UNRRA shows a stronger determination than it has in the past, the French Committee will function in all nonmilitary liberated areas—handling transport, distribution, and sale of goods brought in through Combined Board auspices.

De Gaulle is prepared to disregard any suggestion from Washington, London, or Eisenhower that the committee go slow about assuming authority in France.

View of the committee is that "while it is not accepted in Washington, it is recognized in Paris."

The Dutch government is prepared to administer relief within the framework of UNRRA, but has already bought—mainly in Argentina—several million dollars worth of supplies which it is ready to distribute in its own name.

While the invasion armies will administer military areas, **the Dutch have a complete staff of civilian officials** whose names and plans are fully known to underground officials in The Netherlands.

The change to full freedom of action under a liberation government will in some respects be gradual, for the Dutch plan to retain certain occupation decrees until the whole country is liberated.

When liberated countries will be given an opportunity to choose their government is uncertain. **Some authorities want elections as soon as each capital is freed; others would wait until the entire country could ballot.**

Swift punishment of Quislings is in the cards in all countries, but not every collaborationist is likely to suffer.

In Corsica, the French Committee is accepting the cooperation of a number of persons who, though they worked with the enemy, are excused on the ground that they were "misled by friends."

The picture in the east is different. **The Greek and Yugoslav governments in Cairo are weak and unstable.** They can make no effective demands for their countries. Furthermore, **they are poor, and will be forced to accept the UNRRA handout.**

Watch the Balkans for a real test of Anglo-U. S.-Soviet collaboration. Both Yugoslavia and Greece lie in an area where Moscow's influence will unquestionably be strong.

Berlin, though admittedly jittery, will not surrender before the invasion begins. The time for any preinvasion deal passed in 1942.

Hitler is determined to fight to the end in the hope that he can make the cost so great—in lives and time—that he can still get something less than unconditional surrender. **But don't look for the Germans to hold out for long when their air force is grounded and ultimate defeat becomes inevitable.**

Only Berlin will be jointly occupied by the Big Three. The rest of Germany will be patrolled by them according to occupation areas determined at the Teheran Conference.

Expect no great peace conference at the conclusion of hostilities in Europe.

It will be months—possibly years—before new, elected governments are

PREINVASION REPORT

BUSINESS WEEK

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established in liberated areas. **In some countries, particularly in eastern Europe, there may be local revolutions before order is fully restored.**

Even in France, it is questionable if a new government, acceptable to the whole nation, can be established without resort to arms—unless the Big Three patrol the country to prevent it.

Germany is more likely to be controlled by a three-power governing group during a long probation period than to be split up into small countries, though its boundaries—particularly in the east—are sure to be altered.

No broad pattern of postwar settlement has been agreed upon, despite all the conferences that have been held since the Atlantic Charter was drawn up.

Since the passing of the most critical months of the war (the spring and summer of 1942), **viewpoints of the great powers and of the governments of the principal occupied countries have steadily diverged.**

The "General Patton school"—with a large following in both Britain and the U. S.—**favors an imperialistic interpretation of the Charter**, with Britain, and the U. S.—and Russia as necessary—determining world policies and maintaining the peace. A growing group around Churchill favors this plan.

A near-rupture developed between Churchill and Eden at the beginning of this year when the internationally minded foreign minister insisted on a democratic interpretation of the Charter—with full and active participation of the smaller nations. Roosevelt and Hull back the international collaboration plan.

Worry in both Washington and London is the real stand of Moscow. While rendering lip service to the Atlantic Charter, **the Russians have insisted on unilateral action in settling certain minimum postwar problems** (notably in Poland and the Balkans), and the British and Americans are not yet certain how far Moscow will carry this stand.

On specific economic problems, this cleavage is just as apparent.

Nothing in the recently outlined world monetary plan assures that the world will not yet break up into a sterling and a dollar bloc.

Neither is there any assurance that extreme nationalism will not dominate postwar world trade, though Secretary Hull is vigorously throwing the vast financial and economic weight of the U. S. on the side of freer international interchange of goods.

Despite the terrific drain on men and supplies caused by the invasion, expect no letup of pressure on Japan.

Conditions in China—both political and economic—are dangerous. This calls for quick action—is responsible for a shift in strategy to cut through Japan's island possessions straight to the China coast where relief supplies and military equipment can be delivered in quantity rather than trickle over the Burma Road or "hump" routes.

Occupation of the Philippines is scheduled for this year; arrival at the China coast near Hong Kong early in 1945.

If Allied forces succeed in this maneuver according to schedule, the Japanese in Malaya and the Netherlands Indies would be hopelessly isolated and big supplies of rubber and tin would soon be available to the U. S.

If the Germans capitulate in 1944, the war with Japan can end in 1945.

Australia's Aid

Manpower is shifted to meet production demands of reverse lend-lease. More men placed in war industry.

The mild storm which raged around Australia's announcement that 90,000 men would be transferred from the armed forces to essential industry has been returned to its teapot by the full facts from Canberra.

New Allocations—Six months ago, when Britain and the United States had their 1944 requirement schedules for Australia's doorstep, the war cabinet shuffled manpower allocations to meet new demands.

To fulfill raised munitions and food quotas, Australia will transfer 30,000 experienced farmers and industrial workers to military service to war industry and agriculture. In addition, the 5,000 men released each month from the armed forces—wounded or sickness casualties, five men who have passed the age of 40, and World War veterans no longer needed in coastal garrisons—will be shifted into war work.

To Offset Loss—Meanwhile, 45,000 youths attaining the age of 18 will enter the services, so that in balance Australia's active military forces will be increased by 15,000 since the 60,000 discharges would have occurred in any event.

At the start of this year, Australia's military personnel—army, navy, and air force—totaled 870,000, or 12% of the total population (Canada's armed services constitute 7% of its population; the U. S. complement of 11,350,000 will be 8.4% of its population).

Although such a comparison is more interesting than useful, casualties to date—killed, wounded, and prisoners—in proportion to population are 1.1% for Australia, 0.16% for Canada, and 0.3% for the U. S.

Majority Volunteer—Of the 870,000 men in the Australian armed service, 49,000 are volunteers available for service anywhere in the world. The remainder, drafted into service, can be sent only in the Southwest Pacific.

On the war production front, Australia's effort stacks up fairly well with other munitions-producing nations. Of the present working population of 7,000,000 (46% of the country's total population), 1,370,000 are in the armed forces, defense construction, and munitions industry.

And while comparisons are of questionable value because of differences in definitions of categories of work, Australia's manpower devoted to war is 40.7% of the total work force compared with 36.6% for the U. S.

• **Big Producer**—According to the Foreign Economic Administration, the 1943 proportions of gross national production devoted to war were 54% for Britain, 52% for Australia, 49% for Canada, and 47.5% for the U. S. Australian war expenditures are now at the rate of \$2,000,000,000 a year.

Australian industry is turning out tanks, combat planes (including engines), gun carriers, destroyers and corvettes, 20 types of guns, naval mines, and air bombs, 53 types of radios, and 73 types of gun ammunition.

• **Saving Shipping**—In the Pacific war, the Allies are turning more and more to Australia and New Zealand for both munitions and food. The chief factor is distance, and every ton produced in the combat area is a saving of shipping measured in millions of ton-miles.

The turnaround time between a West Coast U. S. port and the Solomons is roughly four and a half times a turnaround from Sydney; the differential is even greater when compared with Australian shipments from ports nearer the battle scene.

• **Reverse Lend-Lease**—For this reason, more than 90% of the food required by American forces in the Southwest Pacific is supplied under reverse lend-lease by Australia, and any gaps remaining after New Zealand has made its contribution

are also filled by Australia in the South Pacific area.

During 1944, according to Australia's Minister of Commerce William J. Scully, the Commonwealth will be feeding the equivalent of 12,000,000 persons—5,000,000 more than the country's population. This is probably only slightly above prewar food exports, however, inasmuch as Australia always exported food in quantity. During this year Australia will turn over 95% of its fresh pork output for export and for Allied troops in the area.

• **Aid Is Expanding**—In the fiscal year 1942-43, Australia's reverse lend-lease of \$191,750,000 amounted to 11.4% of total war expenditures. By June 30 of this year, reverse aid will total \$514,750,000, with expenditures during the current year comprising 17% of total war spending.

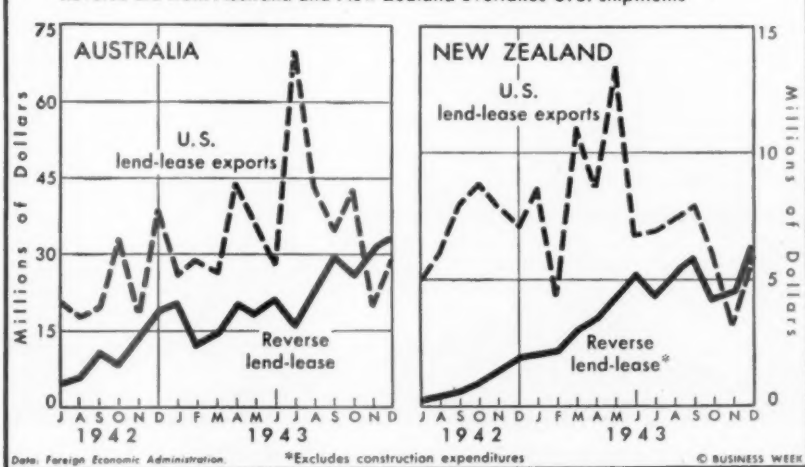
Food supplied to the U. S. between 1941 and the end of 1943 amounted to 250,000 tons, but in the current year, meat deliveries alone are scheduled to reach 125,000 tons. In addition, Australia supplies thousands of tons of bread and cereals, canned fruits and vegetables, butter, sugar, and eggs.

Calculating the value of reverse lend-lease is a tricky job, at best, due to price differences which are not reflected in conversions of national currency to dollars at the official rate of exchange. This is likely to be one of the most argued points when any final accounting on lend-lease occurs.

• **Easy to Underestimate**—Australian aid, calculated at one Australian pound

"FAVORABLE" LEND-LEASE BALANCE

Reverse aid from Australia and New Zealand overtakes U. S. shipments



Lend-lease aid to Australia and New Zealand totaled \$803,000,000 through Dec. 31, 1943. Reverse lend-lease, acknowledged by Washington up to that date, totaled \$454,251,000. At the

present time, reverse lend-lease from the two countries is running at the rate of \$41,000,000 a month, or slightly above their current receipts of United States lend-lease.

equaling \$3.23, can be shown to understate that nation's material contribution, according to the lend-lease reports. Thus, Australia is currently supplying the U. S. Army with 1,000,000 blankets which will be credited to reverse lend-lease at \$2.64 per blanket. A similar blanket made in this country costs the U. S. government \$7.67. Reverse aid credits for food supplies value Australian food at about 50% of the cost of U. S. food.

Apart from food and munitions, Australia supplied American troops with 8,000,000 articles of clothing and equipment up to Nov. 30, 1943. The list includes 5,500,000 pairs of socks, 620,000 boots and shoes, 376,000 jackets and pullovers, 390,000 blankets, and underclothing, shirts, trousers, and towels. This year Australia will supply 1,000,000 pairs of boots to U. S. forces.

Australia has maintained a 60,000-man nonmilitary work force, run by the Allied Works Council, which has handled construction in the Southwest Pacific area for the Allied command. About one-third of its job has been for the U. S.—stores, schools, hospitals, workshops, assembly and repair depots, barracks, munitions dumps, airports, and transport maintenance.

The outfit has built 300 airfields with 3,000 miles of 50-ft. runways. One repair and assembly depot for U. S. forces, completed in nine weeks, consists of 608 buildings on 18 sq. mi. of land.

In Sydney, the Australian govern-

ment supplied two 1,000-bed hospital units and three 750-bed units.

● **Big Job Yet to Come**—Although Australia has been at war more than four and one-half years, and has fought actively on both the European and Asiatic fronts, its biggest job is yet to come. It will be the principal base for full-scale operations designed to free the Indies, the Philippines, and establish a footing on China's mainland for the final drive against Japan.

Lake Lowered

Mexico rushes Texcoco project to hike production of mineral salts. New station to develop industrial uses.

MEXICO, D. F.—Lowering of the waters of Lake Texcoco, in the outskirts of the federal district, has uncovered a tremendous deposit of mineral salts ranging in depth from 60 ft. to 180 ft.

● **Started Years Ago**—Draining of the lake was begun 50 years ago when a tunnel was built through the mountains to run off stagnant waters of the Valley of Mexico. Completion of the job was hastened recently to permit exploitation of the salt deposit.

The Mexican National Irrigation Commission has just completed a \$300,000 solar evaporation plant, covering

2,100 acres and called "El Caracol" the snail—because of its spiral form. The commission has also built a small experimental station to investigate the commercial uses of the salts.

● **Composition**—Results announced by the investigators show the composition of the deposits as follows:

Sodium chlorate	50%
Sodium carbonate	40%
Potassium chlorate	4%
Sodium sulphate	2%
Sodium metaborate	2%

To feed the snail, a 20-mi. spiral drainage canal has been built and artesian wells 20 meters deep have been bored to add more subsoil salts to the mixture in the collecting canal. The pump-house to inject the mixture from the canal into the evaporation plant is completed.

● **Development Plans**—The next phase of the program is development, preferably by private capital, of one or several plants to use the crude salts for chemical manufactures. Sodium carbonate, for instance, is needed for glass making, in metallurgy, leather processing, and by the soap industry.

Caustic soda, a derivative of sodium carbonate and slaked lime, is used in making soap, paper pulp, and in oil and fat refining.

● **To Cut Imports**—Mexico looks to the natural wealth of the old lake to reduce drastically its future imports of mineral salts.

FARM EDUCATION PAYS

Above the 60th parallel, stretching for thousands of miles across the Soviet Union, live the Nentsi, the Evenki, and the Yakuts—distinct and primitive nomadic tribes.

Years ago, Moscow began the job of teaching these tribes to read and write, encouraged them to settle down, sent geologists, doctors, teachers, and agronomists to the wilderness. Before the war and before the scientists taught them how to farm, the tribes lived on fish, reindeer, and imported grains.

Now an area of 900,000 acres is under cultivation during the short summer season, and settlements have become self-sufficient.

The growing season at 60 deg. north latitude is 65 days long. Crops sown after late June thaws are harvested by September. With the aid of manure—as much as 80 tons to the acre—grain crops have averaged 23 bu. to the acre (U. S. average 27 bu.), and potatoes, 10 to 135 bu. to the acre (U. S. average 137).


Although most of the farms are family plots of 4 to 5 acres in size, a collective of nearly 5,000 acres is being cultivated in the Naryn area.



ALL-IN-ONE KITCHEN

An all-electric kitchen unit is Britain's counterpart of some of the "future" appliance mockups now being shown in the United States to whet postwar markets (BW—Mar. 11 '44, p92). Meas-

uring about 12x8x3 ft., the white enameled cabinet contains everything but the kitchen sink, and is designed to be recessed into a wall. The unit on display at London contains a refrigerator, stove, clock, ironing board, and plenty of cupboard space.



HERE ARE THE ALARMING FACTS ABOUT AMERICA'S NEW No. 1 CRITICAL MATERIAL

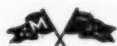
Fuel — our most basic war resource — is rapidly becoming America's No. 1 critical material. Serious shortages of coal and other fuels are now in sight, and unless conservation steps are taken promptly, there is little doubt that we shall be faced with serious curtailment in war production, not to mention essential civilian requirements during this year and next.

The reasons for this shortage, avoidable or otherwise, are no longer important, for the facts of the situation remain. A competent survey reveals that we must start at once to conserve fuel — 29,000,000 tons of coal and proportionate amounts of other fuels during the coming year.

Fortunately this crisis does not find us unprepared. Organized and already in operation is the National Fuel Efficiency Program. It is conducted by a Council comprising some of the nation's most competent fuel engineers and functions in cooperation with the Bureau

of Mines. All over the country ranking engineers have enlisted in support of the program. They will operate as Coordinators to direct the efforts of several hundred Regional Engineers, all volunteers, who will endeavor to visit every industrial plant and large user of heating fuel to seek cooperation and offer helpful suggestions, where desired.

The success of the program depends in large measure upon the support of executives of companies operating plants or buildings that use substantial amounts of fuel. If you are one of this group, here's what you can do to help. Tell the men in your plant concerned with fuel utilization about the urgency of the situation and ask them to cooperate fully with the Regional Engineer who will soon call upon them. By doing this you will not only make an important contribution to one of your country's most vital war problems, but will also pave the way for worthwhile savings in your plant operation. A-792



This space is contributed by the undersigned company for the purpose of furthering the important work of the National Fuel Efficiency Program.

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WALTER A. PETERSON, Treasurer
April 19, 1944.

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CANADA

Postwar Preview

Survey in two Ontario towns puts housing first in list of purchasing plans, with durable goods and education next in line.

TORONTO—In a test survey made by the Canadian Chamber of Commerce to find out the postwar purchasing trends of Canadians, it has been discovered that in the first two years after the war they plan to spend an average of \$1,328 on housing, durable goods, education, and travel.

• **Homes First**—The survey just released was made in the industrialized area of southern Ontario where there is also good farming country. The twin communities of Kitchener and Waterloo (total population of 46,000) were used.

The survey showed that citizens plan to spend \$16,500,000 in the first two postwar years, of which more than \$9,000,000 will go toward the purchases of houses, with down payments likely to run to \$2,250,000. About \$1,500,000 will be spent on house repairs, renovations, and installations.

• **Appliances Listed**—Postwar families (12,617 families in the two towns) are expected to place orders for 2,020 gas or electric stoves ranging in price from \$100 to \$200; 3,050 refrigerators at an average of \$200 each; 2,050 washing machines costing from \$80 to \$150; about 1,000 sewing machines and 1,900 radios.

Further indicating the pattern of postwar market demand, the survey revealed that 2,500 used cars will be required to maintain this particular community until new postwar models are available, and 80% of the potential buyers are willing to pay an average price of \$800 for them. The remaining 20% is prepared to pay up to \$1,200.

• **Education and Travel**—Based on this survey, many Canadians will be in the market for homes costing less than \$5,000. In Kitchener-Waterloo, where 59% now own their own homes, 1,800 houses costing less than \$5,000 are being planned, 250 houses to cost between \$5,500 and \$12,000, and ten costing more.

In the two towns, 580 parents plan to spend \$436,500 for education of their children, and 106 citizens have earmarked \$316,000 for travel.

• **Funds Available**—That the Canadian public has been and is making provision

for this postwar spending is shown by the fact that, excluding housing, 20% of the total money will be readily available, 20% will be financed by short-term credit, and not more than 4% will be borrowed on other terms.

Incomes are expected to be well maintained, with 32% of the population earning less than \$1,500 a year in the postwar period. Three-fourths of the population is expected to be in the \$1,500 to \$2,600 income bracket and the other fourth expects to earn more than \$2,600.

Estimates Mount

Canada's commitment for social security hiked \$1,800,000,000 for housing to be built after the war.

OTTAWA—Canada's rapidly mounting commitments for prospective postwar social security—including a cradle-to-grave Canadian Beveridge plan—has been boosted \$1,800,000,000 by the submission of a ten-year national housing program to Parliament.

• **600,000 Units**—The promise of new housing and plans for implementing a scheme were drafted by the housing committee of the government's Reconstruction Committee.

The program envisages expenditure of \$180,000,000 a year to construct 600,000 housing units during the postwar decade. The first 5,000 units scheduled for construction in 1946.

• **Three Categories**—Housing will be divided into three categories: low-cost homes, medium-cost, and high-cost buildings.

The government will be asked to derivate the first two categories—loans at not more than 3 1/2% interest and private capital will finance the high-cost building.

Local authorities, under the draft plan now being studied, will be made responsible for carrying out the scheme.

Legislation to provide funds for the initial stage of the plan may be passed by the current session of Parliament.

• **Guaranteed Market**—Canada's construction industry, including timber interests, has a watchful eye on postwar building plans.

The ten-year scheme presented to Parliament means a guaranteed market if it goes through. And, with Britain's

mitted to a similarly grandiose rehous-
ing and reconstruction program (page
40). Canada has hopes of getting an
important slice of Britain's orders for
construction materials, chiefly lumber.
Main obstacle, however, is Canada's
strong creditor position in London, and
the likelihood that Britain will lean
heavily on Scandinavian sources.

Lighter Newsprint

Canadian mills will ship
85,000 tons of 30-lb. stock to
U. S. this month. Change means
drop in total tonnage.

Canada's experiment in the produc-
tion of 30-lb. newsprint for delivery to
the U. S. in May and June got under
way this week with completion of tabu-
lations of orders from American pub-
lishers. May shipments will include
about 85,000 tons of 30-lb. stock and
12,436 tons of the standard 32-lb.
paper. This will mean that U. S. use
of the light paper will rise from the cur-
rent rate of 150,000 tons a year to
more than a million tons, or better
than one-third of the total consumption.

Tonnage to Drop—As a result of the
shift to lightweight paper, total tonnage
of Canadian newsprint deliveries will
drop—partly because of production diffi-
culties, but principally because 30-lb.
paper requires more sulphite pulp which
in turn requires more ground pulp than
the newsprint ingredients.

WPB, in announcing the new U. S.-
Canadian agreement, noted that a shift
of production from the current output
of 200,000 tons of 32-lb. paper to 100%
output of 30-lb. stock would net only
82,500 tons of the light paper—an
8.75% drop in tonnage and a 2.67%
drop in square-yardage.

More Advertising?—U. S. publishers,
held by WPB limitation orders to ton-
nage quotas, are anxious to get the
lighter stock to cash in on advertising
they have been forced to turn down of
late (BW—Jan. 29'44, p104).

On the Canadian end, some mills are
lagging on 30-lb. production despite
the new price rise of \$4 a ton (granted to
U. S. producers last month), hoping to
benefit from costly conversion experi-
ence of other mills. Industry experts
expect that June output of the light
stock will rise 50% as production bugs
are ironed out.

Most Canadian mills are equipped
with high-speed, wide-width machines
unsuitable for 30-lb. paper processing.
The new weight requires slower opera-
tion to avoid frequent breakage of the
paper run.

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5531

THE MARKETS

(FINANCE SECTION—PAGE 75)

Although the continuity of the move has since been broken, gains scored in the recent simultaneous rise by both rail and industrial stocks for six straight days proved more than enough to repair the damage inflicted on equity market values generally by the short-lived but sharp sell-off seen on the New York Stock Exchange early last week.

• **Rails, Industrials Recover**—Because of that uptrend, rail and industrial stock price indexes now disclose the recovery of as much as 30% to 40% of the losses suffered during the six-week decline that followed the rather rapid demise of the once-so-promising March rally.

However, even Wall Street's most vocal congenial bulls haven't let themselves become too excited.

• **Creeping Advance**—For the move thus far, except for the closing hour of Big Board trading last Monday when the tempo did quicken a bit, has been pretty much of a creeping advance.

A lot of issues, too, haven't done very much yet. And keen buying interest has been so lacking that daily trading on the stock exchange has reached the lowest levels in many months.

Nevertheless, though it is evident that there has been little lessening in the acute case of "invasion jitters" affecting Wall Street in recent weeks (page 75), the bulls are watching the current market very closely and getting ready to ballyhoo any spectacular uptrend on a minute's notice.

• **"Investment" Buying**—Already in some quarters, in fact, quiet talk is heard concerning "investment" buying—rather than short covering as others think—

that started the current move toward higher price levels.

And other bulls are pointing, as well, to the better-than-average showing made recently by the rail stocks and second-grade rail bonds.

For this group still doesn't subscribe to the theory of the more conservative brokerage circles that present market levels might well prove vulnerable to events when the second front is in operation, or to the conservatives' belief that until this outlook is clarified, a 50% cash-50% invested position is preferable.

• **British Buying**—The bulls think such uncertainties already pretty well discounted, and thus they anticipate no important liquidation when the invasion occurs.

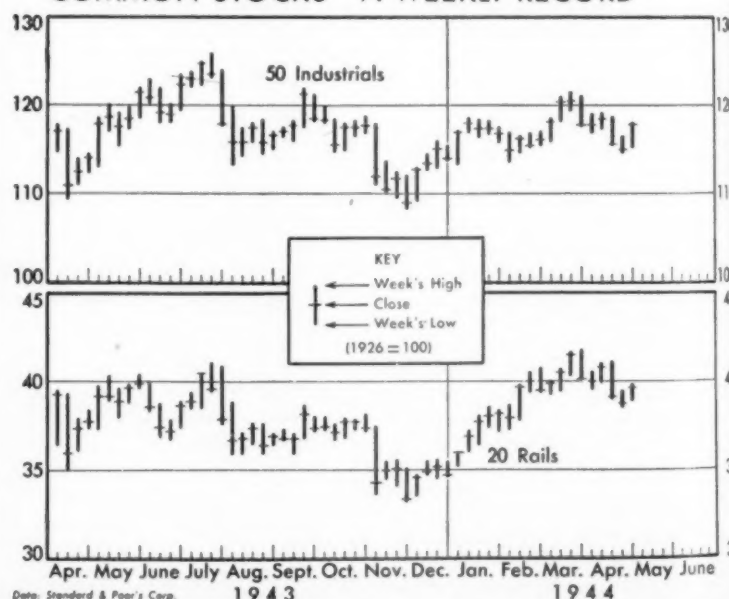
To clinch their argument, they are ready to point to the recent British buying which has sent the London Financial Times industrial stock index to a new 1944 high and to levels some 115% above its "Dunkirk low," in sharp contrast to the similar rise of but 40% now shown in the same Standard & Poor's compilation.

Security Price Averages

	This Week	Week Ago	Month Ago	Year Ago
Stocks				
Industrial ...	117.8	115.1	117.8	118.1
Railroad	39.6	38.8	40.0	39.2
Utility	50.8	49.9	51.1	47.1
Bonds				
Industrial ...	121.2	121.3	120.7	116.1
Railroad	105.7	105.2	105.1	99.6
Utility	116.2	116.6	116.5	113.6

Data: Standard & Poor's Corp.

COMMON STOCKS—A WEEKLY RECORD



Data: Standard & Poor's Corp.

THE TRADING POST

Warime Research

highlight on what war does to industrial research is shed by the 31st Annual Report of the Director of the Mellon Institute. A foreword to the technical summary of the institute's activities runs as follows:

Research help has been rendered to the War Department, particularly the Army Air Service Forces, and to the Navy Department, especially the Bureaus of Aeronautics and Ships. Of like importance is the collaboration with the War Production Administration, the Rubber Reserve Co., the National Defense Research Committee, and the Metallurgy Committee of the National Academy of Sciences. Useful also is the work of the National Fuel Efficiency Council and the Technical Advisory Service of the War Plants Corp. Incidentally, 20% of the fellowships are at present sustained by small manufacturers.

These relations have enabled the Institute to find out exactly the scientific aid needed, to keep progress in wartime research before the basic requirements of abiding industry, sturdy determination, and continuous effort are in constant evidence.

The war has interrupted the recording of events but has stimulated studies by agencies as to directions in which further work is needed. The creative value of the comprehensive wartime investigations and the common realization of the essential nature of research in postwar planning have changed research-mindedness. It is broadened and recognized that research must be the basis of expansion in employment and commerce. The structure and policies of industrial research are therefore being examined never before. The belief is general in government that such research will be the major factor in determining the future progress of our nation.

Industrial research has competently faced the tasks of war and perceives the technical problems that will enter into the new age. During the past year Mellon Institute has given chances to guide many industries taking steps to see that well-sustained research policies are laid down. The results are more available to society various scientific developments of wartime America. Principally because of these opportunities during the emergency, the Institute has been strengthened in research personnel and material. Although it has been hard to replace 62 men and women who are in national service, mainly in the Army and Navy, wherever possible, new junior positions on industrial fellowships have been filled by the appointment of women, and at present 73 biologists and chemists are reinforcing the senior men, investigational specialists on industrial fellowships. The staff members of the department of research in pure chemistry and of the analytical departments have likewise been increased.

The Institute's industrial research staff

consists of 201 fellows and 214 fellowship assistants, the scientists and engineers employed on the 101 industrial fellowships in operation (46 multiple and 55 individual fellowships). Two of these fellowships have been active 30 years; 7, 25 years; 8, 20 years; 15, 15 years; 27, 10 years; and 60 in all have concluded at least 5 years of research. During the fiscal year—March 1, 1943, to March 1, 1944—the Institute's expenditures for pure and applied research amounted to \$1,652,539.

The many researches of the Institute unite a variety of effort. The fellows not only collaborate closely among themselves but are dependent all the time on various other members of the organization, such as librarians, analysts, accountants, secretaries, mechanics, and storekeepers. An organic part of the Institute, the servicing staff, 136 in number, keeps up efficiently the general research facilities. An advisory committee of fellows aids most usefully in these operations.

Through much of the talk about postwar planning runs an assumption that business will have to find jobs for all the men in the armed forces.

That assumption, of course, is not warranted. The men who make up the armed forces are a cross-section of our young manhood. In that cross-section must be many who never were job-holders and who do not expect to be job-seekers after the war—either in industry or in any of the other departments of business.

* * *

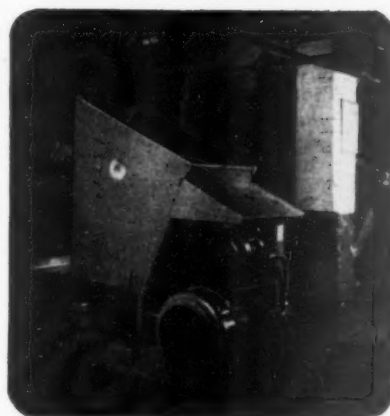
Last week Business Week reported some data on how service men feel about their old jobs (BW—Apr. 29 '44, p. 46). The report there quoted from the Genesee County (N. Y.) Committee for Economic Development offers some additional details.

At latest report, 1,034 had answered a question as to their postwar plans. Their replies showed that 546 want their old jobs back, 99 want to change from their former jobs because of increased technical training in the armed services, 58 have their own businesses, 75 wish to return to school, 23 do not expect to return to this country, 11 will remain in service, 130 have "other plans," and 92 don't know what they want to do.

These figures suggest that, of the 1,034, not more than 737 will be in the job-seeker class, while 58 actually expect to be job-makers. It is not safe to project this small sample too far, but it does suggest that we may deceive ourselves when we assume that business must have jobs waiting for everybody now in uniform.

W. C.

**You *CAN'T*
fire oil or gas
by hand—**



Iron Fireman automatic Poweram stokers in Senior High School, Joplin, Missouri.

**you *SHOULDN'T*
fire coal by hand**

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No one would think of firing gas or oil except by automatic methods. A coal fire, too, takes on entirely different and better characteristics when fired by modern, automatic, self-regulating equipment. Iron Fireman automatic coal stokers create the highest type of combustion efficiency. Their use prevents over-production and under-production of steam.

If you suspect that your present fuel or firing method could be improved, ask for a free survey by Iron Fireman engineers. Iron Fireman equipment has achieved striking improvements and economies in many boiler rooms. It may be able to do so in yours. It costs nothing to find out. Our nationwide organization of qualified factory representatives and dealers is at your service. Iron Fireman Manufacturing Co., Portland, Oregon; Cleveland, Ohio; Toronto, Canada. For free survey, write or wire to 3151 West 106th Street, Cleveland 11, Ohio.



**IRON
FIREMAN**

Automatic Coal Stokers

THE TREND

INVASION AND THE FINAL CHALLENGE

The idea that our national security some day would depend upon the successful invasion of continental Europe by our armed forces was inconceivable to the average American but a few short years ago. Yet, today our whole strength is assembled to that very action and for assuring a sound and permanent peace.

America became great without aggression, without tyranny. Our greatness has been achieved without destroying others; ours is a history of unprecedented industrial progress, of development of our own resources and reliance on our own efforts.

Aggression is foreign to American philosophy. Yet, today we find ourselves faced with the choice of destroying or being destroyed. Today we are confronted by the hard fact that the kind of peace which we all so fervently desire can be achieved only by crushing autocracy and by removing the causes of aggression.

• We are now engaged in the accomplishment of the first objective. Since Pearl Harbor a complacent, peace-loving America—the largest of the “soft” and “decadent” democracies—has grown strong and tough. Out of the inherent virility of a free people we have molded the mightiest force for invasion and attack that the world has ever seen.

We have reached our peak rates of war production. We are producing as much war equipment as all the rest of the world combined.

History will record our industrial mobilization as a phenomenal achievement.

The battle of production has been won!

The full might of our armed forces and those of our allies unleashed against the Axis war machine will bring eventual victory. Two and a half years of intensive preparation, backed by 168 years of growth as a free nation, have given us superiority over twenty years of painstaking preparation by the totalitarian and militaristic countries with their enslaved peoples.

• Every American has contributed toward this powerful offensive. Our manufacturers and business leaders have exerted their fullest efforts. Our industries have mobilized their tremendous resources—tapped to the fullest degree their inventive and productive genius. The men and women in the factories, on the farms, and in the mills and mines have played a magnificent part in the tremendous production program. Citizens all are making their contribution to the armed victory that lies ahead.

We have demonstrated that a free people under a free enterprise economy can unite in a common purpose.

When the war is won, we shall be faced by our second objective—removing the causes of aggression. This is a social challenge. It is a challenge to those who would sacrifice our democratic way of life for personal gains and foreign ideologies.

• The best insurance for the continuance of our democracy is a successful democracy. That means a dynamic and not a static democracy. All of us who want to preserve the ideals that have made America—and that includes all but a handful of extremists—must determine to find the policies and programs which will permit us to make the most of the abundance nature has provided for us.

To achieve this end we must recognize the fact that we are but a wheel in the machinery of world economy. A wheel that must drive or be driven. A wheel that must mesh smoothly with the many other wheels or be stripped of its cogs.

We are the only nation on earth free enough and strong enough to shape the mold of its own destiny. We can be hampered by nothing but our own confusion.

• The mind and the heart of all America today brood over the shores of Britain and watch over the narrow waters that wash the beaches of the Continent. And the prayers of all America go with each of those who embark upon that epic passage.

Those of us at home who are producing the fighting tools and who are so earnestly concerned with the problems that will face a postwar America should see now even if we may never have seen it before, that all our plans will be worth just exactly what the men and women who make that passage are prepared, competent, and inspired by their leadership to make them worth.

For those men and women are America!

They have gone out from rich homes and poor homes alike, from farms and factories, from schools and churches, from mines and ranches, from offices and studios, to take their places in the battle line. They are a cross-section of the America that is to be.

Whoever may draw the plans for that America, it is those men and women who will make the plans good. Invasion is their first step toward that end. May the work be speedily done, and may our plans be worthy of that work.

James H. McGraw, Jr.

President, McGraw-Hill Publishing Co.

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